NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-144592

(NASA-CR-144592) UPPER WING SURFACE BOUNDARY LAYER MEASUREMENTS AND STATIC AERODYNAMIC DATA OBTAINED ON A 0.015-SCALE MODEL (42-0) OR THE SSV ORBITER CONFIGURATION 140A/B IN THE LTV HSWT AT A

N76-18219

HC $10.75

Unclas

G3/18 19293

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

February, 1976

DMS-DR-2215
NASA CR-144,592

UPPER WING SURFACE BOUNDARY LAYER MEASUREMENTS AND STATIC AERODYNAMIC DATA OBTAINED ON AN 0.015-SCALE MODEL (42-0) OF THE SSV ORBITER CONFIGURATION 140A/B IN THE LTV HSWT AT A MACH NUMBER OF 4.6 (LA58)

Prepared under NASA Contract Number NAS9-13247

by

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	VSD High Speed Wind Tunnel 512
NASA Series Number:	LA58
Model Number:	42-0
Test Dates:	September 30 through October 2, 1974
Occupancy Hours:	49

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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

UPPER WING SURFACE BOUNDARY LAYER MEASUREMENTS AND STATIC AERODYNAMIC DATA OBTAINED ON AN 0.015-SCALE MODEL (42-0) OF THE SSV ORBITER CONFIGURATION 140A/B IN THE LTV HSWT AT A MACH NUMBER OF 4.6 (LA58)

ABSTRACT

The purpose of the test was to investigate the nature of the Orbiter boundary layer characteristics at angles of attack from -4 to 32 degrees at a Mach number of 4.6.

The effect of large grit, employed as transition strips, on both the nature of the boundary layer and the force and moment characteristics were investigated along with the effects of large negative elevon deflection on lee side separation. In addition, laminar and turbulent boundary layer separation phenomena which could cause asymmetric flow separation were investigated.

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SCHEDULE OF COEFFICIENTS PLOTTED:

(A) CL, CLM, CD, CN, CA, CY, CYN, CBL, L/D versus ALPHA

INTRODUCTION

This report presents the results obtained during a program conducted on an 0.015-scale model of the SSV Orbiter Configuration 140A/B to study the nature of the upper-wing-surface boundary layer and to measure the static aerodynamic characteristics at a Mach number of 4.6. These tests were performed in the Vought Systems Division (VSD) High Speed Wind Tunnel from September 30 until October 2, 1974. This program was preceded by a feasibility test regarding the use of thin-film heat flux gages as a method of defining boundary layer characteristics - reported in Reference 1.

This report presents the results of the force testing.

NOMENCLATURE
General

SYMBOL	PLOT SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	PLOT SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
α-RATE	A-RATE	angle of attack rate - 1 - baseline 2 - even 3 - fast up 4 - slow down 5 - fast down 6 - slow up
α-SCHD	A-SCHD	angle of attack direction - 1 - α increasing 2 - α decreasing
δ_a	AILRON	aileron deflection angle, degrees
δ_{BF}	BDFLAP	body flap deflection angle, positive with trailing edge down, degrees
C_{P_x}	CPX	longitudinal center of pressure
C_{P_y}	CPY	lateral center of pressure
C_{P_B}	CPB	base pressure coefficient
C_{P_C}	CPC	cavity pressure coefficient
δ_e	ELEVON	elevon deflection angle, positive with trailing edge down, degrees
	LWGRIT	grit on left wing
	RWGRIT	grit on right wing
δ_{SB}	SPDBRK	split rudder flare angle, positive with trailing edges outward, degrees

SUBSCRIPTS

Symbol	Definition
a	aileron
C	cavity
B	base
e	elevon
BF	body flap
SB	speedbrake

CONFIGURATIONS INVESTIGATED

Figures 2 and 3 present sketches and photographs of the model installed in the test section. Model details are given in North American Rockwell Drawing numbers SS-A00107, SS-A00147, SS-A00148, and NASA LaRC drawing number LD-938915.

Component		
BWVFO		Basic configuration; $B_{19} + C_7 + E_{23} + M_6 + R_5 + V_7 + W_{107}$
BWVF		BWVF with M_6 removed
	B_{19}	Fuselage
	C_7	Canopy
	E_{23}	Elevon
	M_6	Orbital maneuvering system pod
	R_5	Rudder
	V_7	Vertical tail
	W_{107}	Wing

INSTRUMENTATION

The 0.015 scale SSV Orbiter Configuration 140A/B model, equipped wit eight Thermo-Systems Inc. Model 1268 Flush Surface thin-film heat-flux gages, and all readout and recording equipment associated with the heat-flux gages, were supplied by the customer. The same model was used for both the boundary layer study (heat-flux gage test) and the force test.

The aerodynamic forces were measured in six components with the VB-36 balance, an internal strain gage instrument. Model base and cavity pressures were measured with 50-psi Stratham absolute pressure transducer These transducers were located on the model cart and were connected to tubes which were routed along the sting to the measurement site. Instrumentation was also provided to measure the required flow properties and the model cart angle of attack.

TEST FACILITY DESCRIPTION

The Vought Aeronautics Company High Speed Wind Tunnel is an atmospheric exhaust, blow down tunnel with a 4 foot by 4 foot test section size. The Mach number range of the tunnel is from 0.5 to 5.0. Air is stored in six tanks, with a total volume of twenty-eight thousand cubic feet, at a maximum pressure of 600 psia and a nominal temperature of 100 degrees Fahrenheit.

The circuit utilizes both supersonic and transonic test sections, each 4 foot by 4 foot in cross section and slightly over five feet long. For supersonic operation a single-peak variable diffuser is placed downstream of the supersonic test section. For transonic operation the variable diffuser is removed from the circuit and replaced with a porous wall transonic test section with 22 percent wall porosity. The transonic plenum is pumped by ejector action of the main tunnel airstream acting on controllable ejector flaps located downstream of the test section. Adjustable choking flaps, also located downstream of the test region, are utilized for subsonic Mach number adjustment.

A more complete description is found in Reference 2.

TEST PROCEDURES

Preparations for the force program began with the pre-test calibration of the VB-36 balance. After the heat-flux test program the gage cables were removed from the model, the balance was installed, and load-deflection constants were determined for the sting-balance combination.

Check loads were applied to assure that the balance and data acquisition system were functioning properly. Base and cavity pressure tubing was installed and these transducers were calibrated.

During the force runs the tunnel was started with the model at $\alpha=0$ and after flow was established, data sampling at a rate of 10 per second was begun and the model was pitched at a pre-selected rate to the maximum α. Data sampling was most often continued as the model was pitched down at a different rate to $\alpha=0$ where data acquisition was terminated and the tunnel shut down. During the course of the force test program, different pitch rates were employed with the several model configurations, in an effort to uncover discontinuities or substantial hysteresis. Further, four runs (Nos. 61-64) were made with an unsymmetrical configuration and with the model rolled on the sting so that combined pitch and yaw rates would be imposed on the model.

Immediately after a run, the data were reduced using the on-site IBM 1800 Data Acquisition and Reduction System and, during the force test, selected coefficients were displayed on the automatic plotters.

DATA REDUCTION

The data reduction was performed on-site using the IBM 1800 digital computer. During the heat-flux program, only the tunnel flow conditions and the rms meter output were reduced. During the force test, aerodynamic coefficients in six components were computed according to the procedures described in Reference 3.

The pre-test calibration of the VB-36 balance provided standard deviations of the six balance components. These values were used with an arbitrary q = 1500 psf, to compute the following estimates of "worst-case" coefficient deviations, which result from the balance:

Coefficient	Deviation
C_N	$\pm$0.0011
C_m	$\pm$0.0005
C_Y	$\pm$0.0005
C_n	$\pm$0.0012
C_ℓ	$\pm$0.00006
C_A	$\pm$0.00008

In order to provide some means to determine overall accuracy, the following estimations, based on past experience and calibrations, summarize the maximum error associated with the three items:

Dynamic Pressure	$\pm$0.5%
Mach Number	$\pm$1.0%
Digital Data System	$\pm$0.1%

Model data were converted to standard NASA coefficients using the following constants:

Reference Area	S_{REF} = 0.6053 ft^2
Span	b_{REF} = 14.0502 in.
Mean Aerodynamic Chord	L_{REF} = 7.122 in.
Cavity Area	S_c = 0.03409 ft^2
Base Area	S_B = 0.0615 ft^2
Moment Reference Center	M.S. 16.147, 0.375 in. below fuselage reference line.

REFERENCES

1. Pope, T. C., "Heat-Flux Gage Measurements on a Flat Plate at a Mach Number of 4.6 in the VSD High Speed Wind Tunne - A Feasibility Test", Report Number HSWT TEST 498, dated September 1974.

2. Arnold, J. W. "High Speed Wind Tunnel Facility Handbook", Publication Number AER-E1R-13552-B, dated February 1970.

3. Baker, T. M., "Data Acquisition, Reduction, and Presentation for Typical Force Tests at the LTV High Speed Wind Tunnel", Report Number 2-59710/0R-50732, dated July 1970.

TABLE I

TEST : LA-58 DATE : 10-2-74

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
4.6	13.2×10^6 /FT	8.68	
4.6	18.5×10^6 /FT	11.45	

BALANCE UTILIZED: VB-36

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS:

TABLE II

TEST: LA-58 (LTV 4X4 - 512) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 11/13/74

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_a	δ_{SB}	δ_{BF}	L-WING GRIT	R-WING GRIT	α RATE	α SCHD.	NO. OF RUNS	MACH NUMBERS 4.6	TEST RUN NUMBERS
RHY001	BWVFO	A	0	0	0	55	0	25	25	6	1	1	53	
02		A								2	1		54	
03		B								2	2		1054	
04		A								3	1		55	
05		B								4	2		1055	
06		A								6	1		56	
07		B							↓	5	2		1056	
08		A							0	1	1		34	
09		A								2	1		35	
10		B								2	2		1035	
11		A								3	1		37	
12		B								4	2		1037	
13		A								6	1		38	
14		B						↓	↓	5	2		1038	
15		A						0	0	1	1		71	
16		A								3	1		70	
17		B								4	2		1070	
18		A								6	1	↓	69	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

BETA | CN | CLM | CA | CY | CYN | CBL | CL | CD | L/D | MACH | ALPHA | 1.0

COEFFICENTS

α OR β SCHEDULES

A) $-4^\circ \rightarrow 32^\circ$, continuous

B) $32^\circ \rightarrow -4^\circ$, continuous

α - Schedule (IDVAR 1) (IDVAR 2) NDV

1 - α increasing

2 - α decreasing

α - Rate

1 - Baseline
2 - even
3 - fast up
4 - slow down
5 - fast down
6 - slow up

TABLE II - (Continued)

TEST : LA-58 (LTV 4X4 - 512) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE : 11/12/74

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_a	δ_{SB}	δ_{BF}	L-WING GRIT	R-WING GRIT	$\dot{\alpha}$ RATE	$\dot{\alpha}$ SCHD.	NO. OF RUNS	MACH NUMBERS 4.6	TEST RUN NUMBERS
RHY019	BWVFO	B	0	0	0	55	0	0	0	5	2	1	1069	
20		A		-20	-20			25	25	3	1		58	
21		B								4	2		1058	
22		A								6	1		57	
23		B								5	2		1057	
24		A							0	1	1		44	
25		A								2	1		45	
26		A								2	2		1045	
27		A								3	1		46	
28		B								4	2		1046	
29		A								6	1		47	
30		B								5	2		1047	
31		A						0		3	1		67	
32		B								4	2		1067	
33		A								6	1		68	
34		B								5	2		1068	
35		A			-20			25	25	3	1		59	
36		B								4	2	Y	1059	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICIENTS | IDVAR 1) | IDVAR (2) | NDV

α OR β SCHEDULES

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TABLE II - (Continued)

TEST: LA-58 (ITV 4x4 - 512) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 11/13/74

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	δ_e	δ_a	δ_{SB}	δ_{BF}	L-WING CANT	R-WING CANT	$\dot{\alpha}$ RATE	$\dot{\alpha}$ SCHD.	NO. OF RUNS	MACH NUMBERS 4.6	TEST RUN NUMBERS
RHY037	BWVFO	A	0	-20	-20	55	0	25	25	6	1	1	60	
38		B								5	2		1060	
39		A							0	2	1		50	
40		B								2	2		1050	
41		A								3	1		49	
42		B								4	2		1049	
43		A								6	1		48	
44		B								5	2		1048	
45		A						0		3	1		66	
46		B								4	2		1066	
47		A								6	1		65	
48		B								5	2		1065	
49		A		-40	0			25		1	1		39	
50		A								2	1		40	
51		B								2	2		1040	
52		A								3	1		41	
53		B								4	2		1041	
54		A								6	1		43	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II - (Concluded)

TEST: LA-58 (UTV 4X4 - 512 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 11/13/74

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_a	δ_{SB}	δ_{BF}	L-WING GRIT	R-WING GRIT	α RATE	α SCHD.	ϕ	NO. OF RUNS	MACH NUMBERS 4.6	TEST RUN NUMBERS
RHY055	BWVFO	B	0	-40	.0	55	0	25	0	5	2	0	1	1043	
56		A	0	15	0	55			25	6	1	0		52	
57		A	0	15	0				0		1	0		51	
58		C	D	-20	-20				25		1	30		61	
59		E	F							5	2	30		1061	
60		G	H							6	1	-30		62	
61		I	J							5	2	-30		1062	
62		K	L							6	1	45		63	
63		M	N							5	2	45		1063	
64		O	P							6	1	-45		64	
65		Q	R							5	2	-45		1064	
66	BWVF	A	0	0	0			0	0	1	1	0		72	
67	BWVFO	B	0	15	0			25		5	2			1051	
68		B	0	15	0				25					1052	
69		B	0	0	0				25					1053	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES: (C → R) tunnel sector -4° → 32° or 32° → -4° with sting/model rolled for combined α,β

DMS 002

TABLE III MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B_{19}

GENERAL DESCRIPTION : Fuselage, Configuration 3

MODEL SCALE: 0.015

DRAWING NUMBER : VL70-000139B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	1290.3	19.354
Max Width	267.6	4.014
Max Depth	244.5	3.667
Fineness Ratio	4.822	4.822
Area - Ft^2		
Max. Cross-Sectional	386.67	0.087
Planform		
Wetted		
Base		

TABLE III (Cont'd)

MODEL COMPONENT : CANOPY - C_7

GENERAL DESCRIPTION : Configuration 3 per Rockwell lines VL70-000139.

MODEL SCALE: 0.015

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_0 =433 to X_0 =578), In.	F.S. 145.00	2.175
Max Width		
Max Depth		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III (Cont'd)

MODEL COMPONENT : ELEVON - E_{23}

GENERAL DESCRIPTION : Configuration 3 per W_{107}. Data for 1 of 2 sides.

MODEL SCALE: 0.015

DRAWING NUMBER VL70-000139B

DIMENSIONS	FULL SCALE	MODEL SCALE
Area - Ft^2	205.52	0.046
Span (equivalent), In.	353.34	5.300
Inb'd equivalent chord, In.	114.78	1.722
Outb'd equivalent chord, In.	55.00	0.825
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.208	0.208
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Trailing Edge	- 10.24	- 10.24
Hingeline	0.00	0.00
Area Moment (Product of Area & $\bar{c}$) Ft^3	1548.07	0.0052

TABLE III (Cont'd)

MODEL COMPONENT : OMS POD - M_6

GENERAL DESCRIPTION : Basic configuration 3A OMS pods with nonmetric RCS engine housing and nozzles.

MODEL SCALE: 0.015

DRAWING NUMBER : VL70-000139B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	346.0	5.190
Max Width	108.0	1.620
Max Depth	113.0	1.695
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
Station of aft end of RCS nozzle block	1560.0	23.400

TABLE III (Cont'd)

MODEL COMPONENT : RUDDER - R_5

GENERAL DESCRIPTION : Configuration 140C orbiter rudder (identical to configuration 140A/B rudder).

MODEL SCALE: 0.015

DRAWING NUMBER VL70-000146B, VL70-000095

DIMENSIONS	FULL SCALE	MODEL SCALE
Area - Ft^2	100.15	0.023
Span (equivalent), In.	201.0	3.015
Inb'd equivalent chord, In.	91.585	1.374
Outb'd equivalent chord, In.	50.833	0.762
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge		
Trailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Product of area & $\bar{c}$), Ft^3	610.92	0.002
Mean Aerodynamic Chord, In.	73.2	1.098

TABLE III (Cont'd)

MODEL COMPONENT: VERTICAL - V_7

GENERAL DESCRIPTION: Centerline vertical tail, doublewedge airfoil with rounded leading edge.

MODEL SCALE: 0.015

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft^2		
Planform	425.92	0.0958
Span (Theo) - In.	315.72	4.736
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.028
Tip (Theo) WP	108.47	1.627
MAC	199.81	2.997
Fus. Sta. of .25 MAC	1463.50	21.953
W.P. of .25 MAC	635.522	9.533
B.L. of .25 MAC		
Airfoil Section		
Leading Wedge Angle - Deg.	10.000	10.000
Trailing Wedge Angle - Deg.	14.920	14.920
Leading Edge Radius	2.00	0.030
Void Area	13.17	0.0030
Blanketed Area	0.0	0.0

TABLE III (Concluded)

MODEL COMPONENT: WING-W_{107}

GENERAL DESCRIPTION: Configuration 3.

MODEL SCALE: 0.0150

TEST NO. DWG. NO. VL70-000139B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2 Planform	2690.00	0.605
Span (Theo In.	936.68	14.050
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	+ 3.000	+ 3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.24	- 10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	10.339
Tip, (Theo) B.P.	137.85	2.068
MAC	474.81	7.122
Fus. Sta. of .25 MAC	1136.89	17.054
W.P. of .25 MAC	290.857	4.363
B.L. of .25 MAC	182.13	2.732
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.394
Span, (Theo) In. BP108	720.68	10.810
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	8.436
Tip 1.00 $\frac{b}{2}$	137.85	2.068
MAC	393.03	5.895
Fus. Sta. of .25 MAC	1185.31	17.780
W.P. of .25 MAC	293.653	4.405
B.L. of .25 MAC	251.76	3.776
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.10	0.10
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	118.333	0.027
Leading Edge Intersects Fus M. L. @ Sta	500.0	7.50
Leading Edge Intersects Wing @ Sta	1083.4	16.251

Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

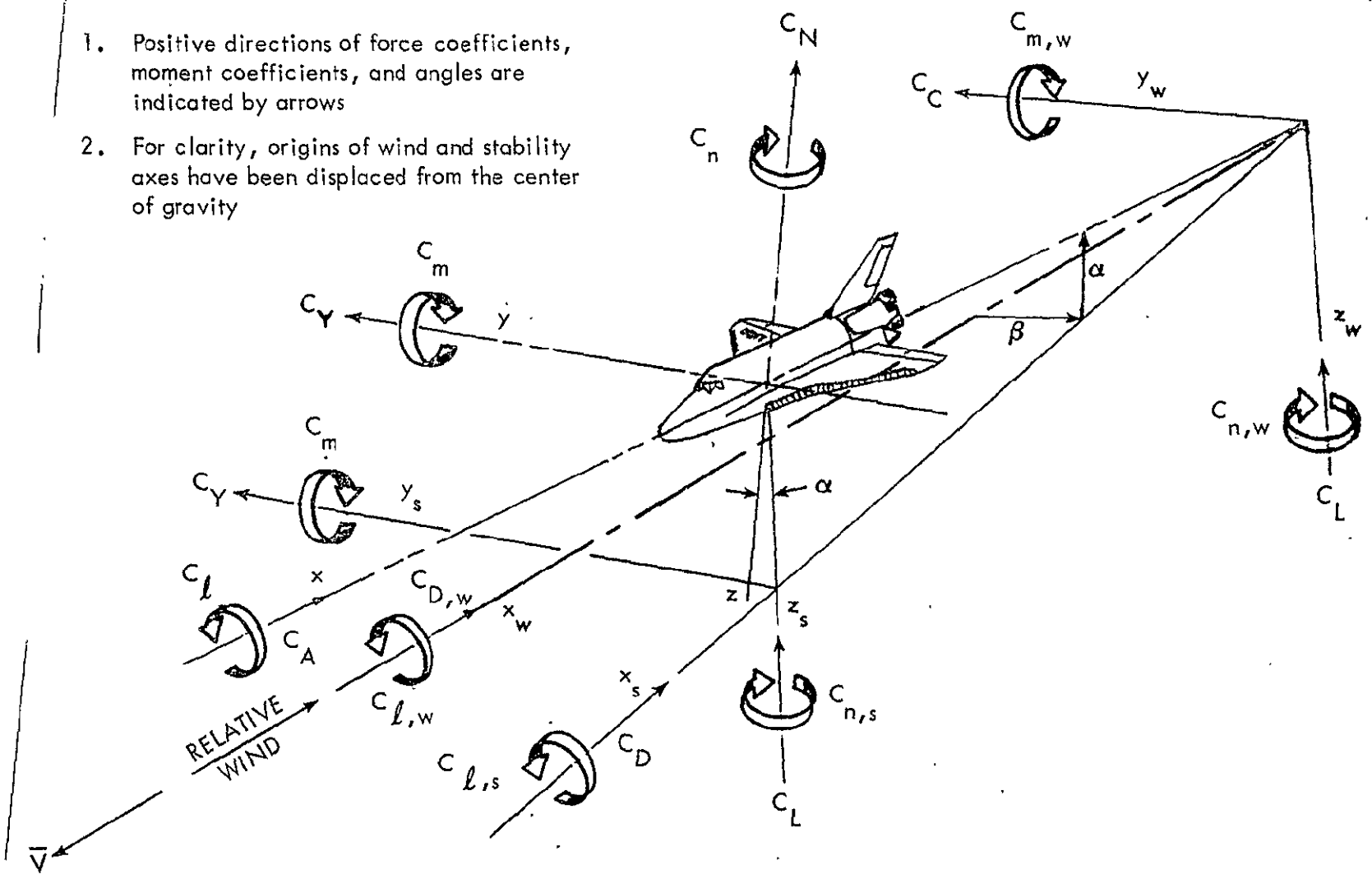
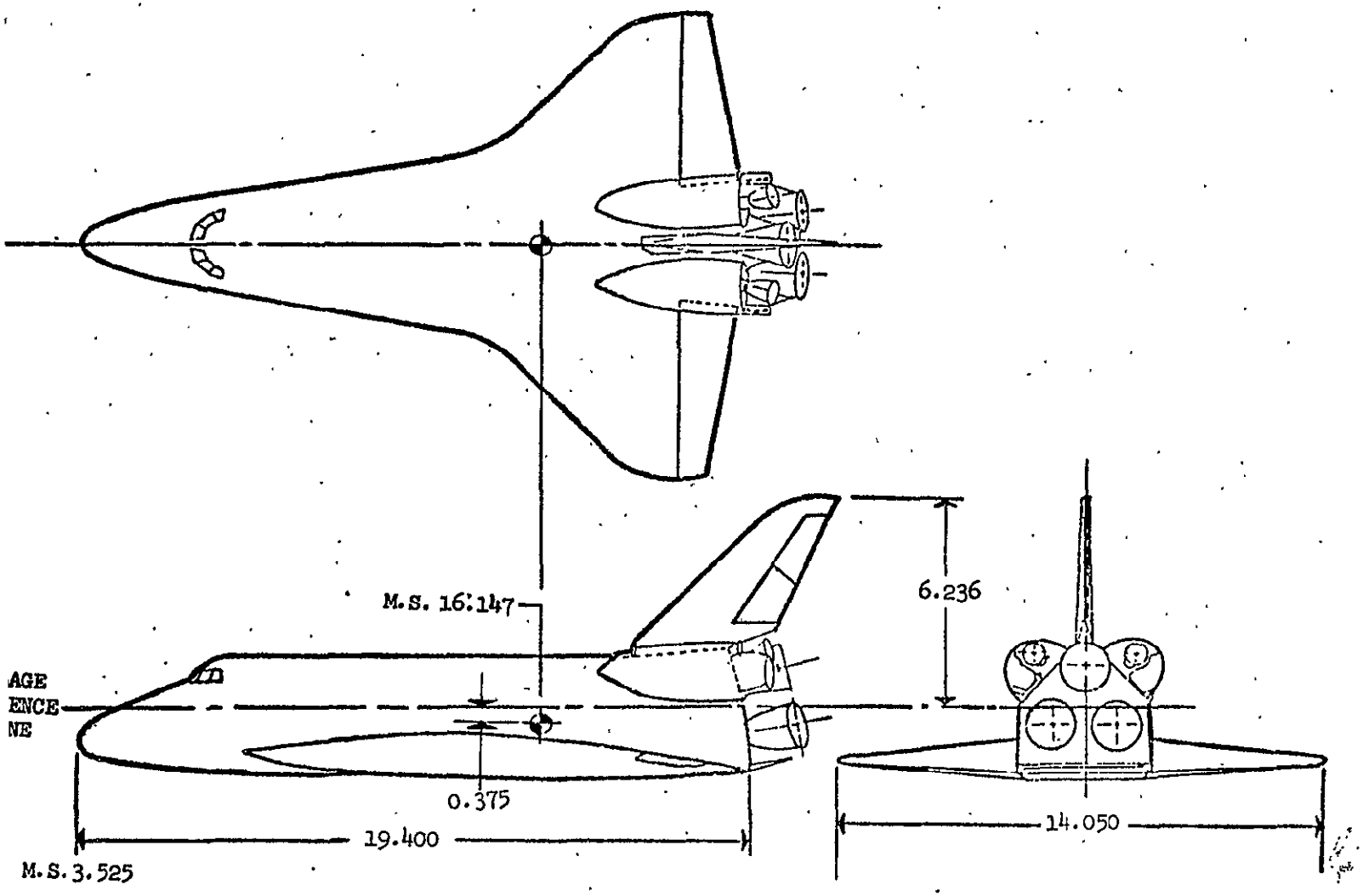
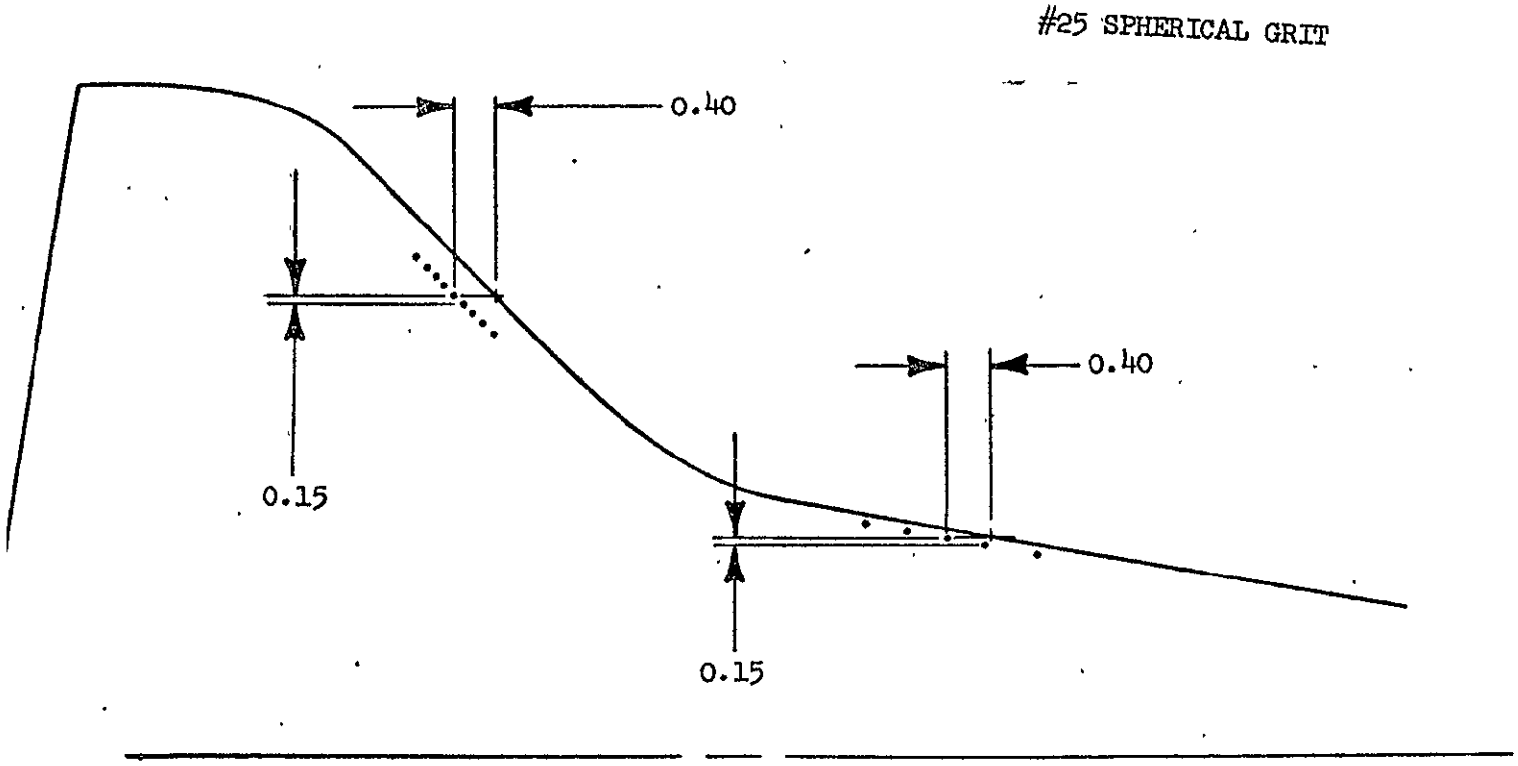


Figure 1. Axis Systems.



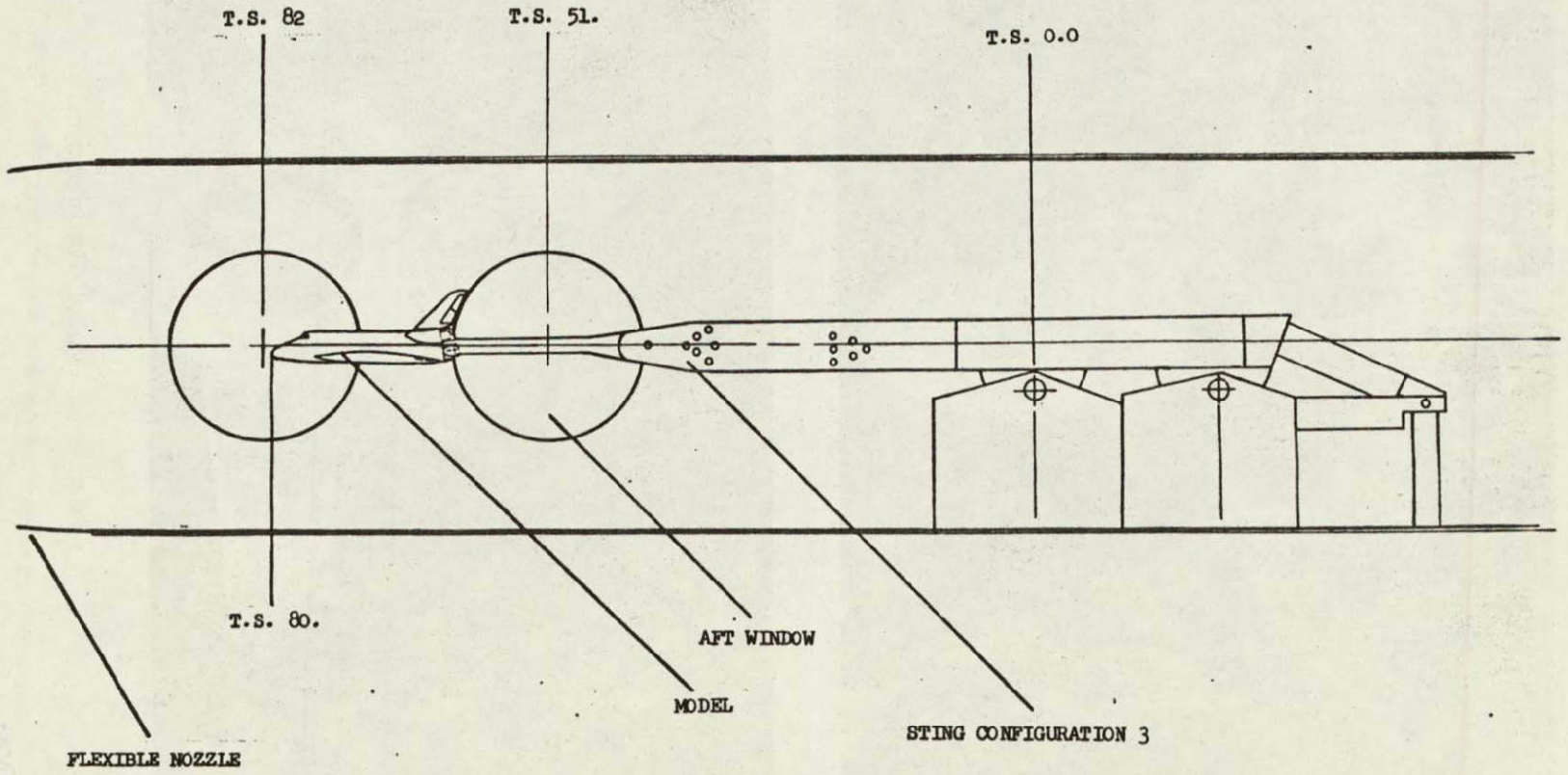
a. Orbiter Configuration

Figure 2. Model Sketches.



b. Grit Pattern

Figure 2. (Continued).



c. Model Installation Sketch

Figure 2. (Concluded).

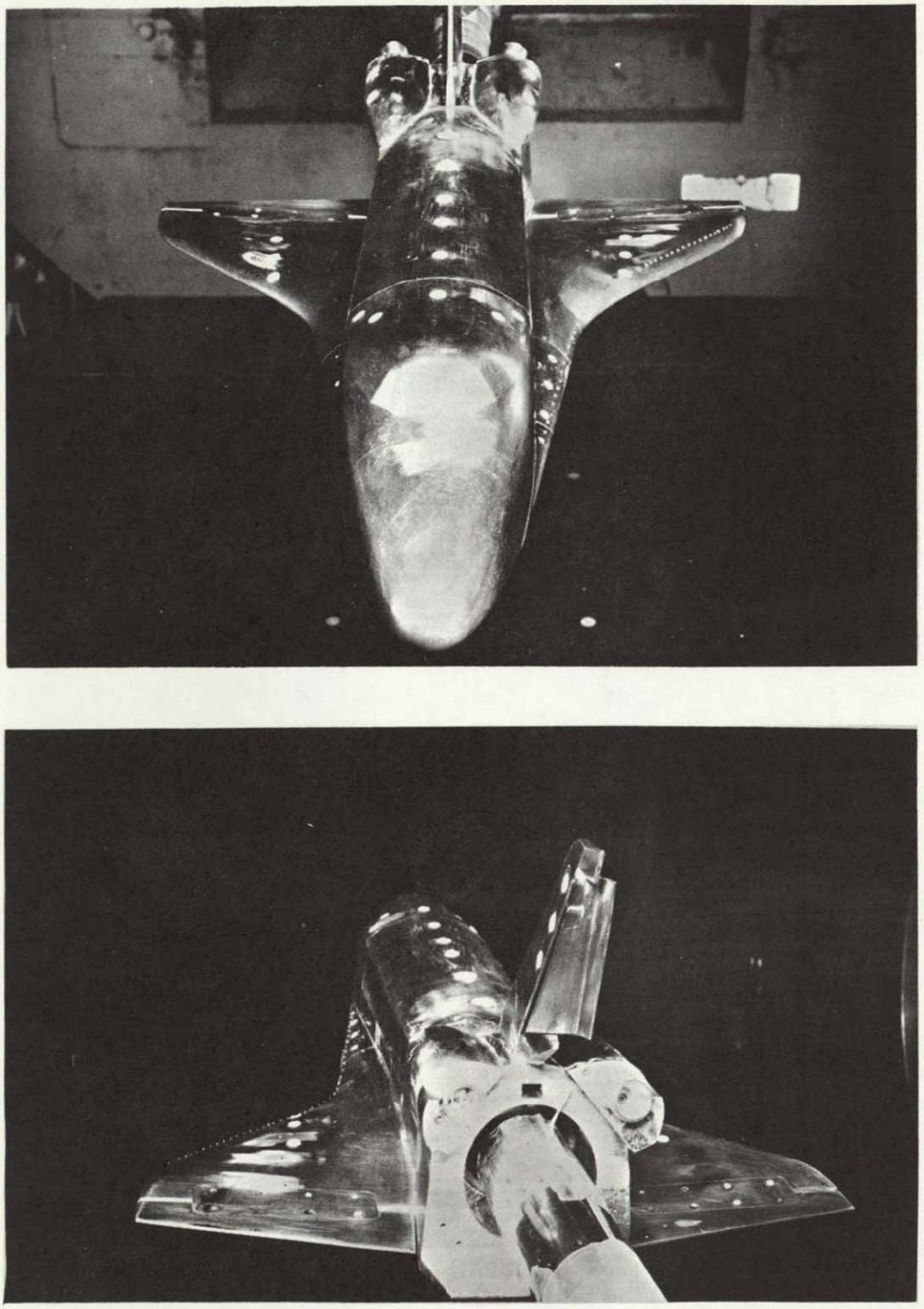


Figure 3. Model Photographs.

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DATA FIGURES

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)	⊿⊲	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)	⊿	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

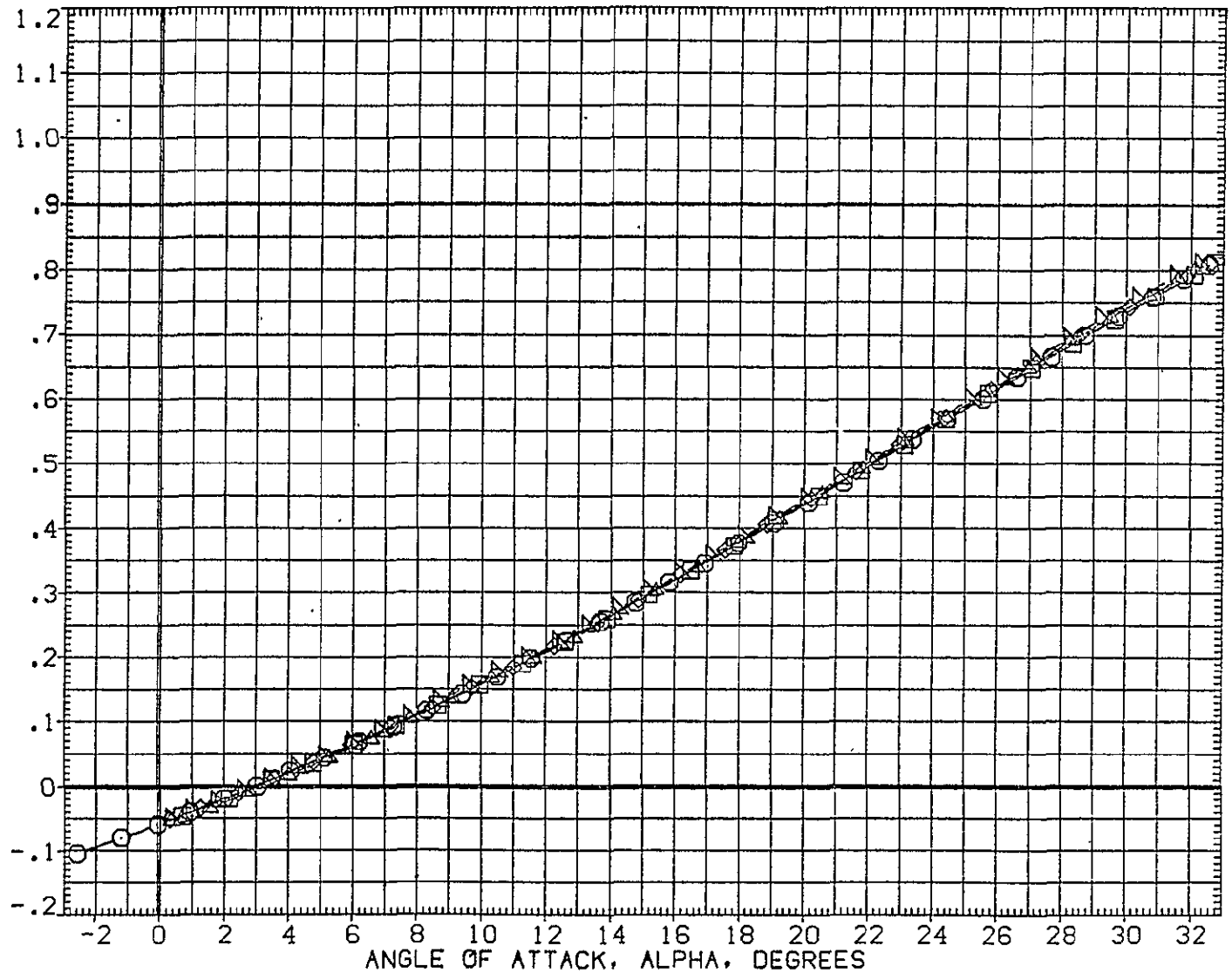

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

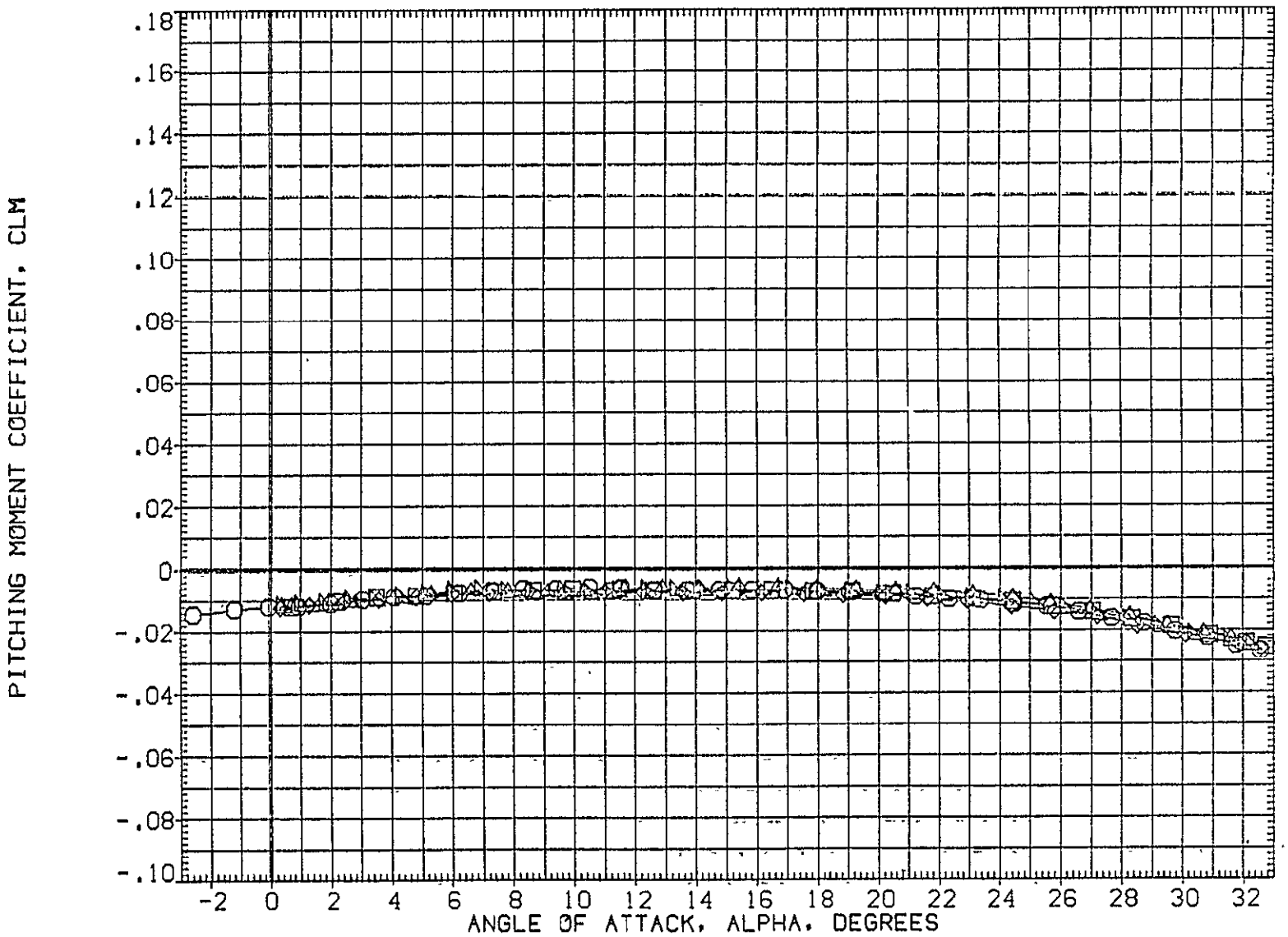

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

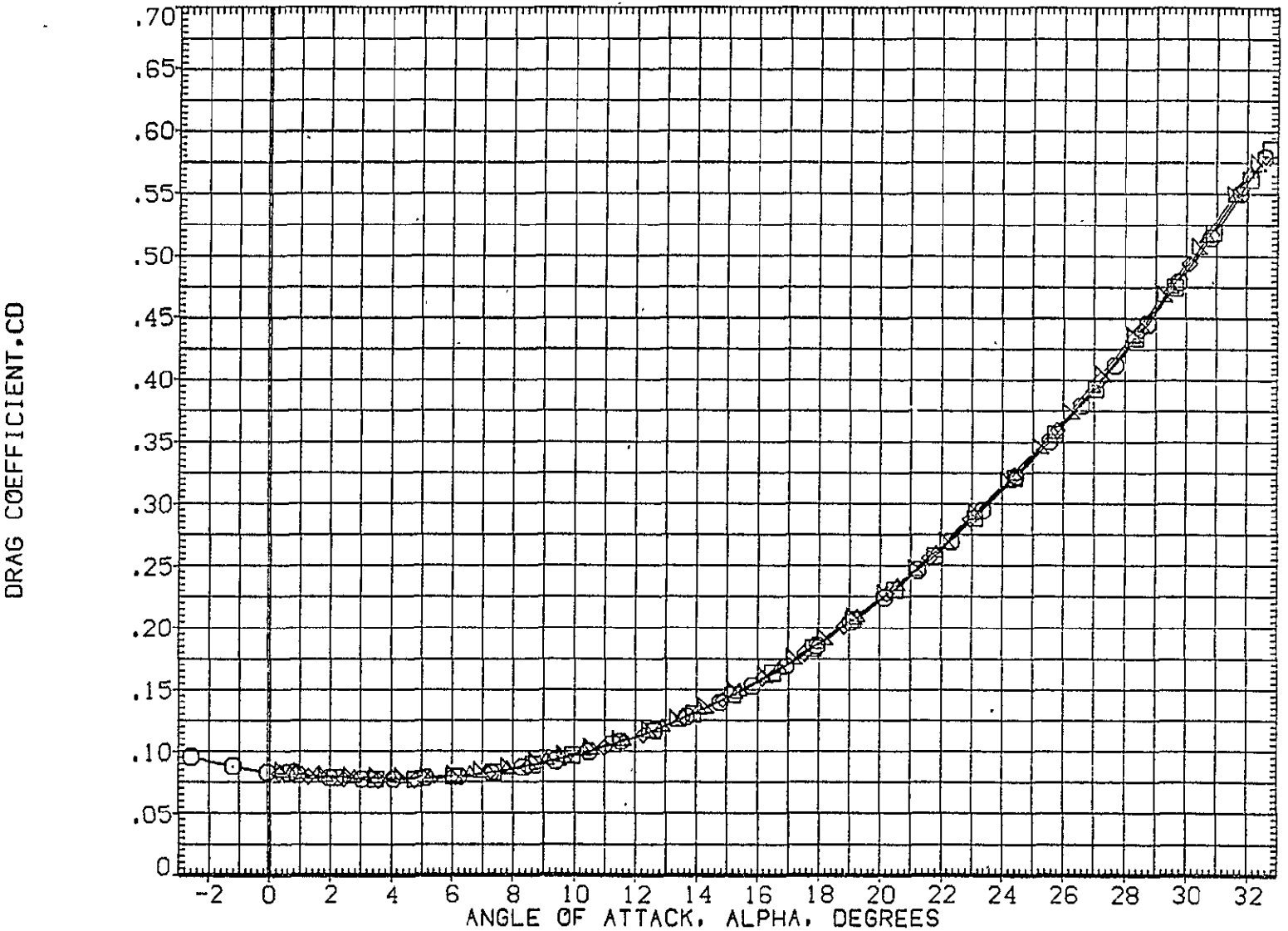

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO08)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	1.000	1.000
(RHYO09)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	2.000	1.000
(RHYO10)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	2.000	2.000
(RHYO11)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	3.000	1.000
(RHYO12)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

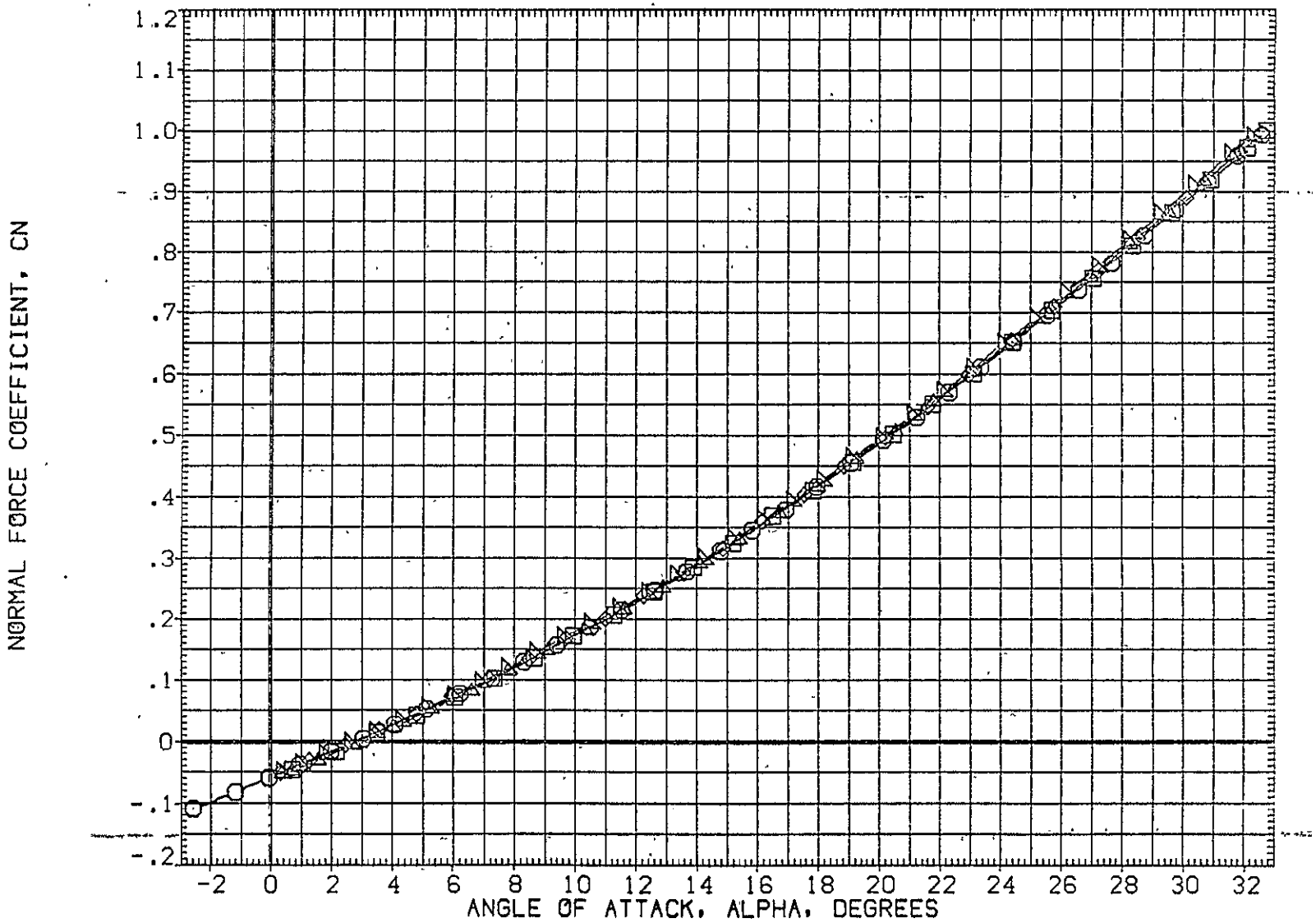

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

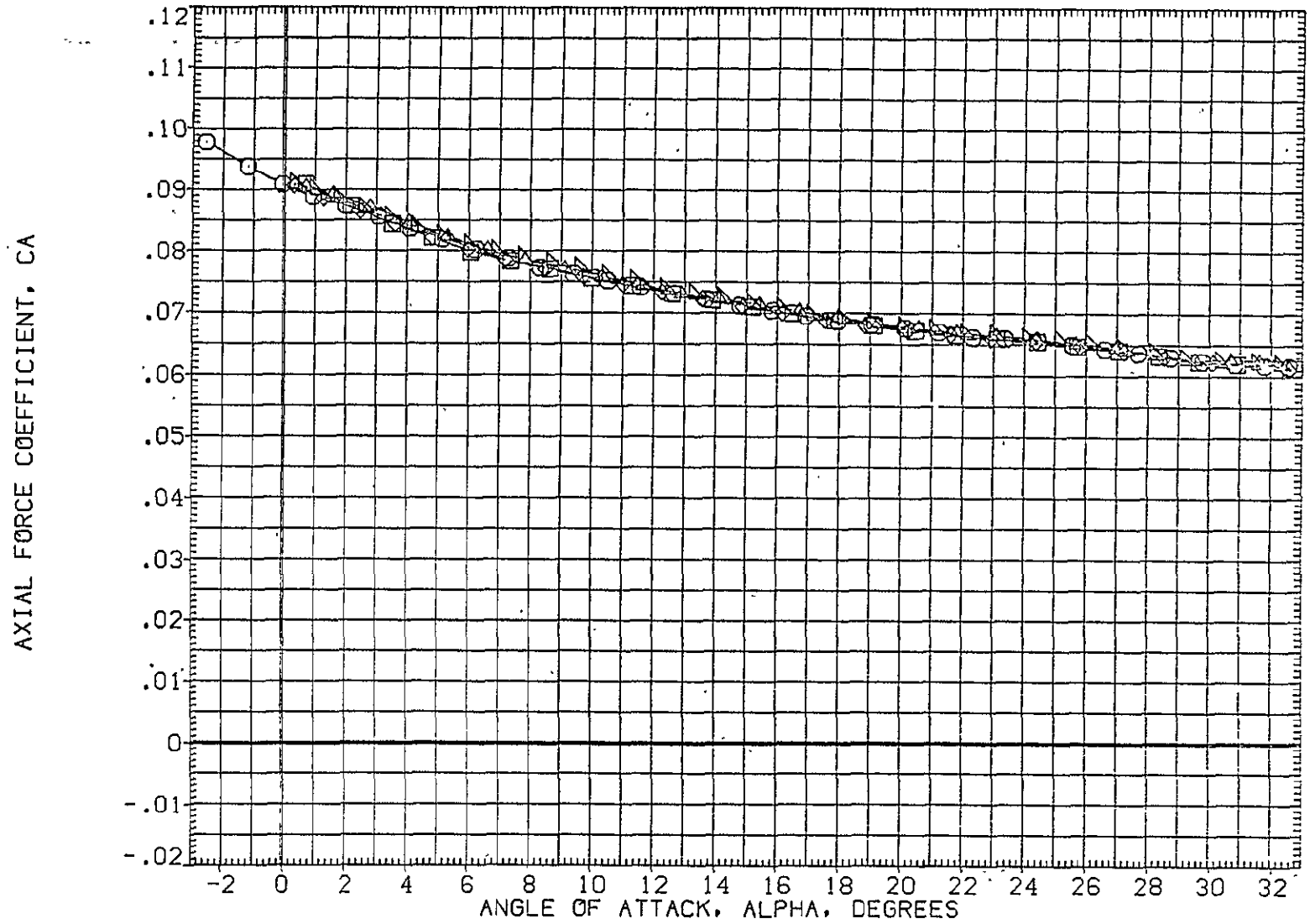

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

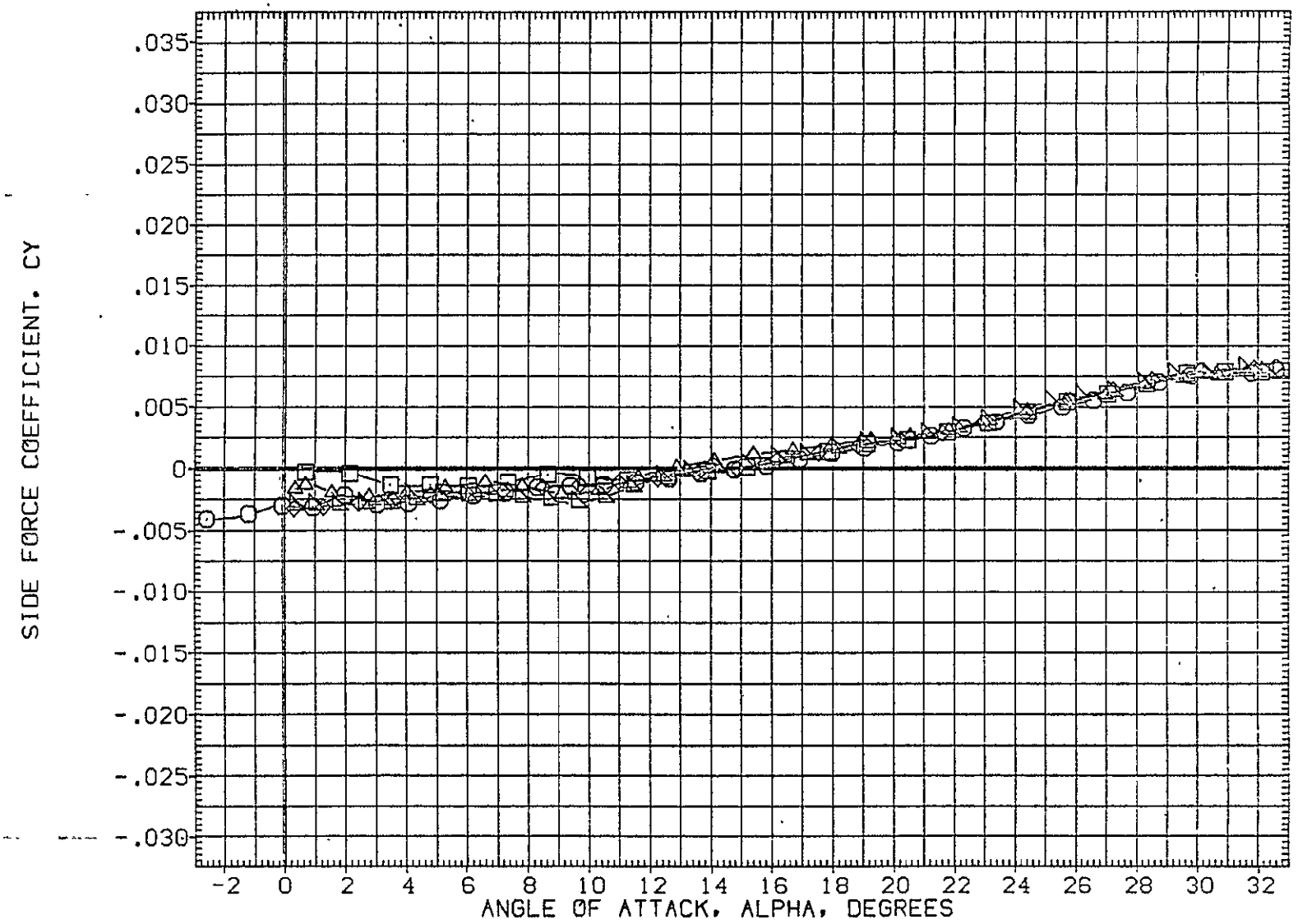

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

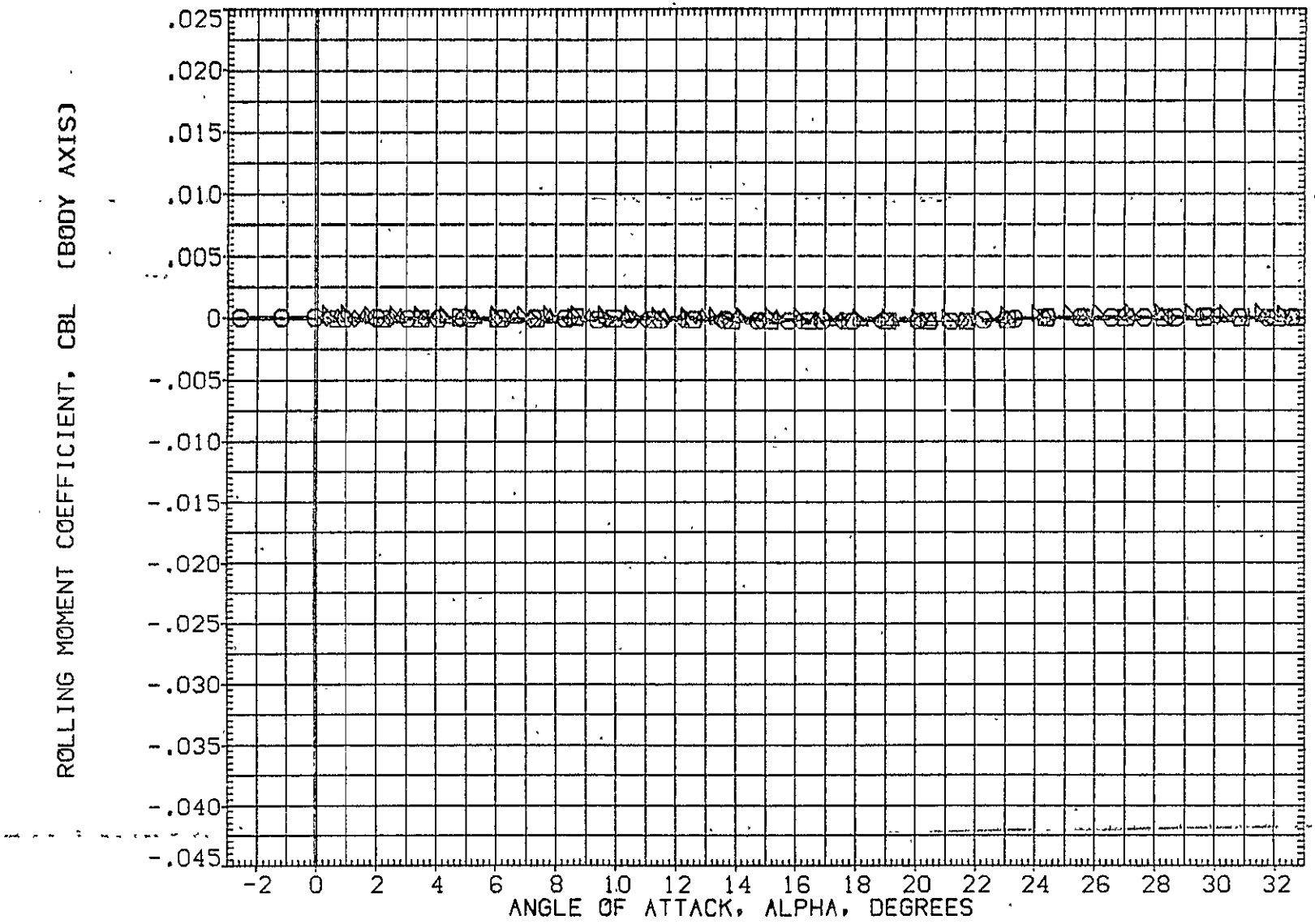


FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY009)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY010)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000
(RHY011)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY012)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

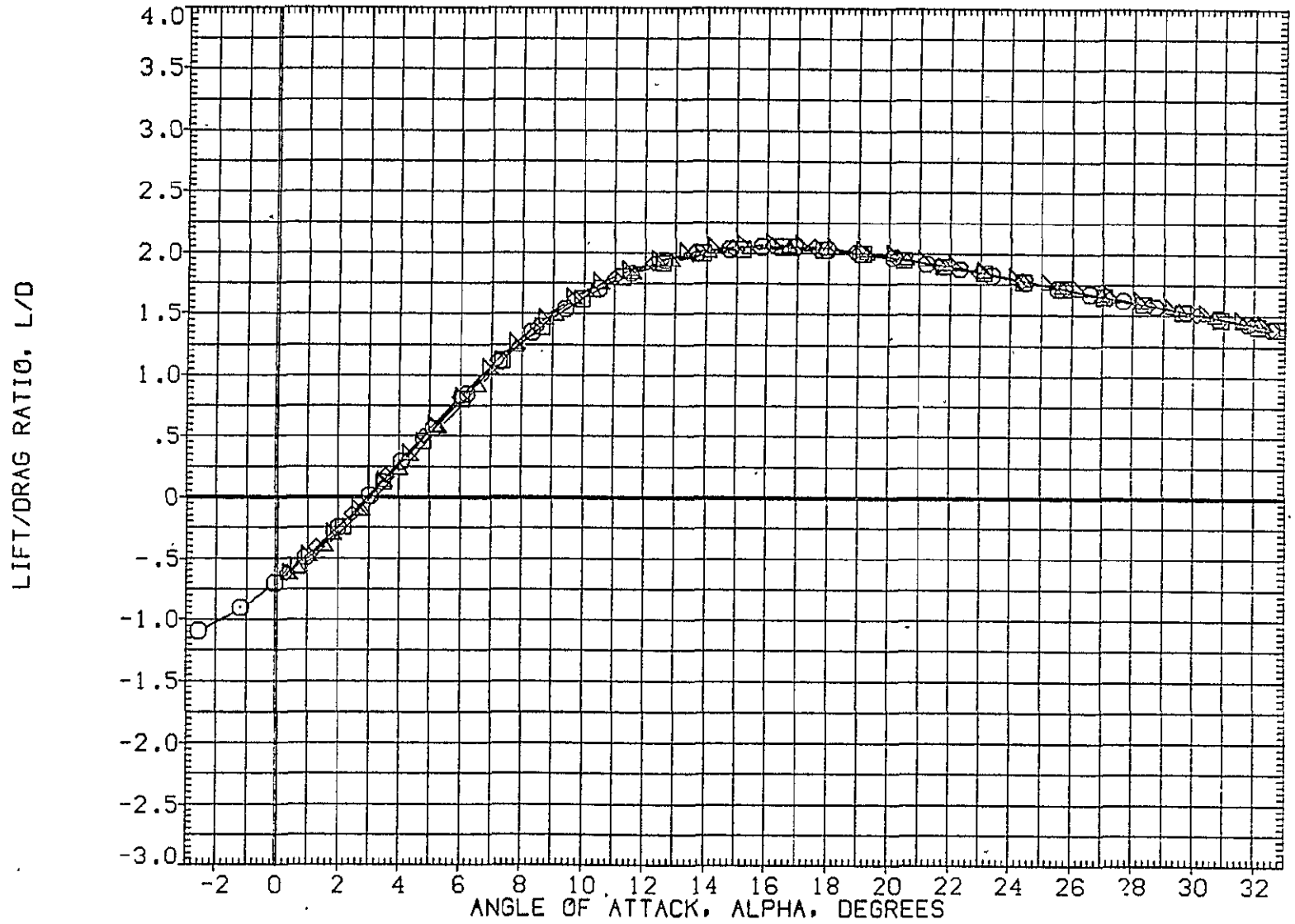


FIG 4 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014) ◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

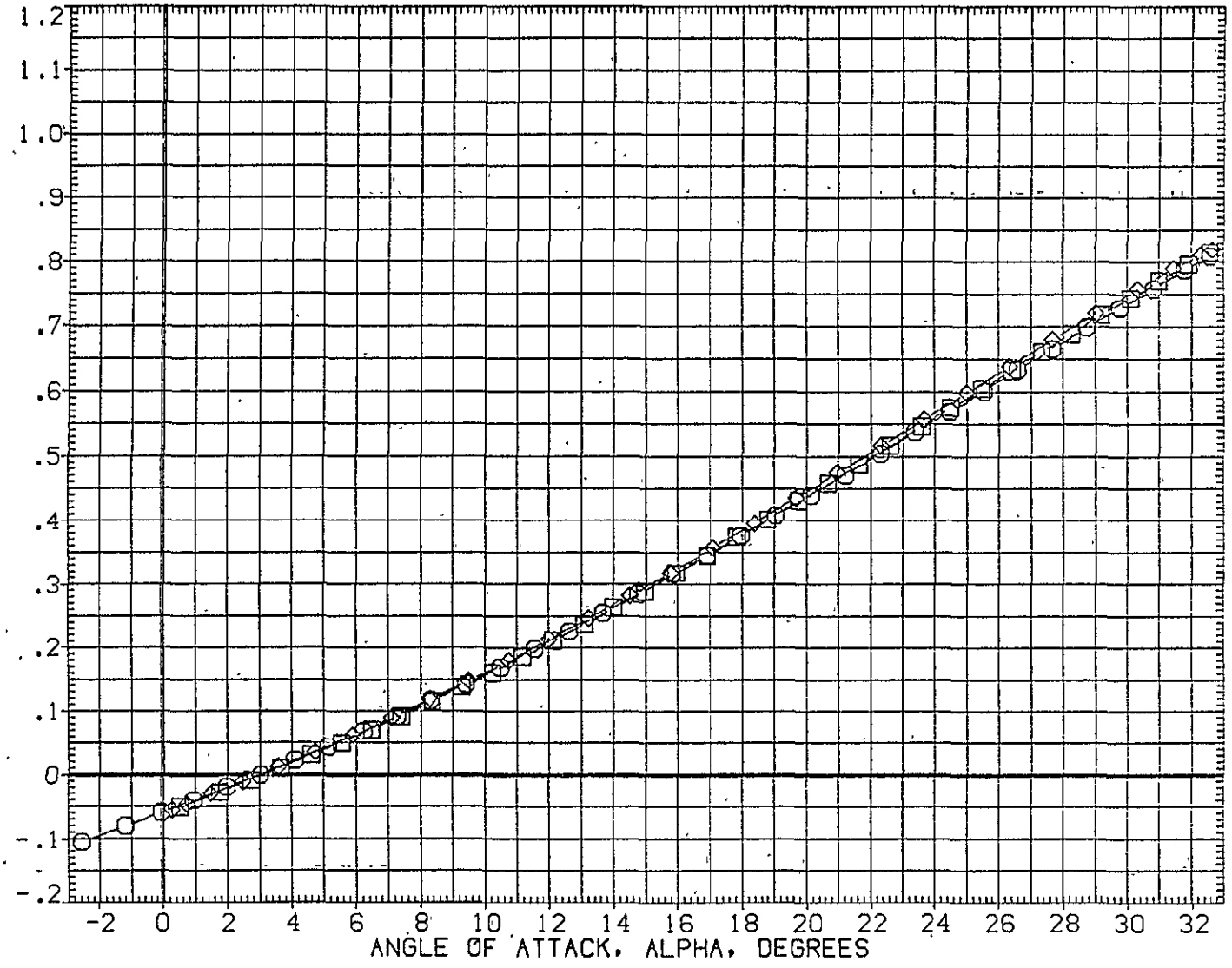


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

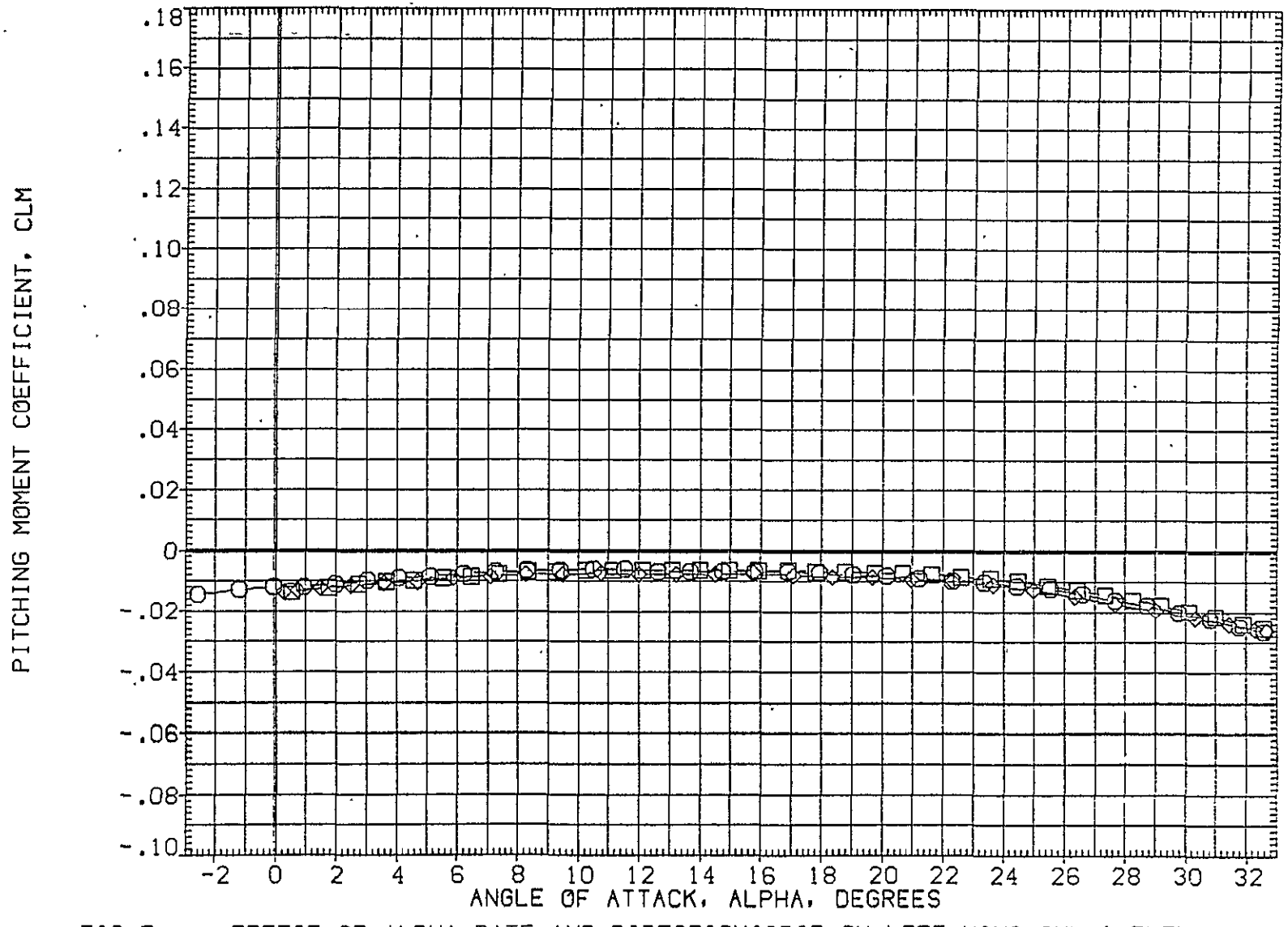


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

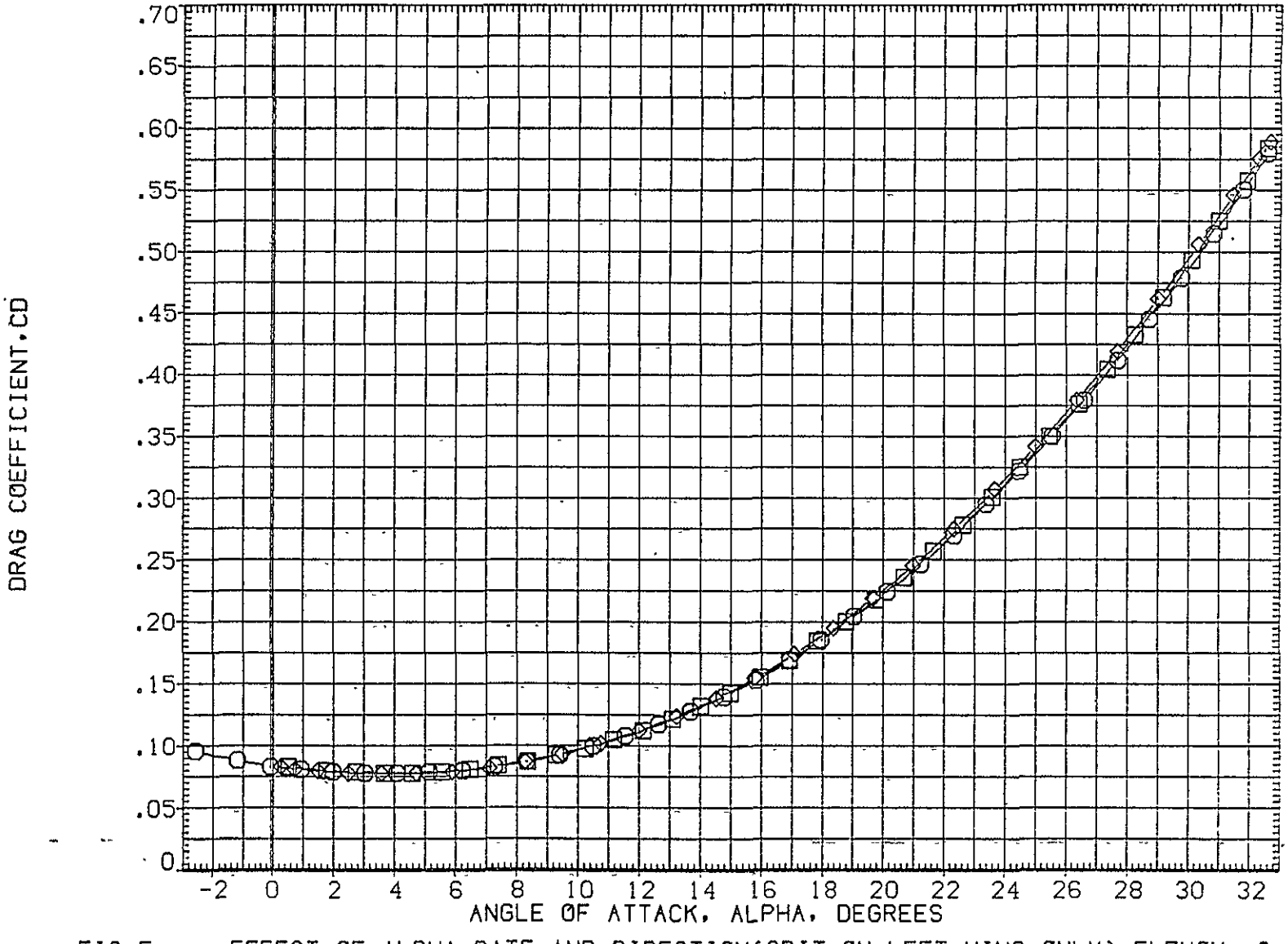


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

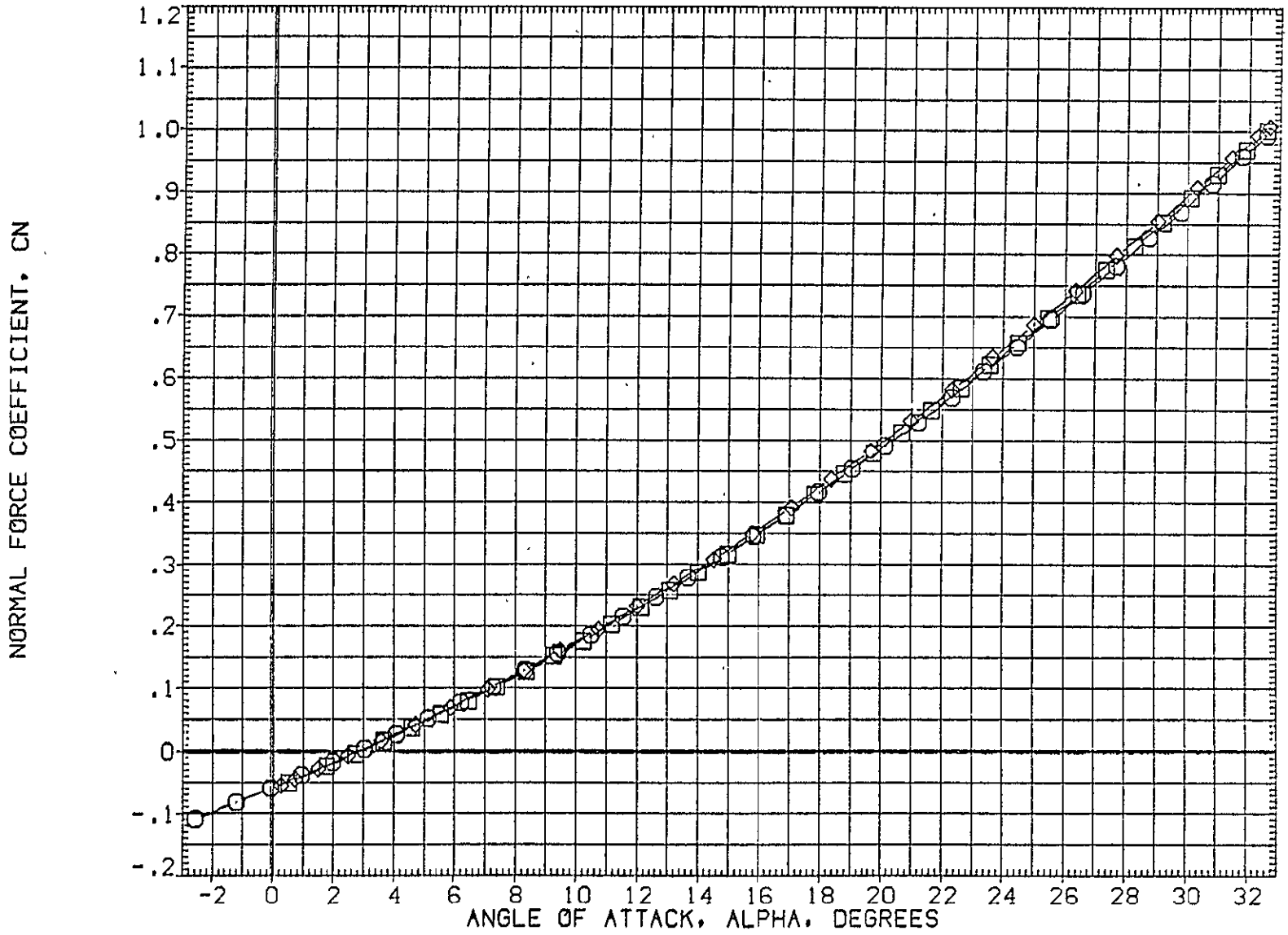


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

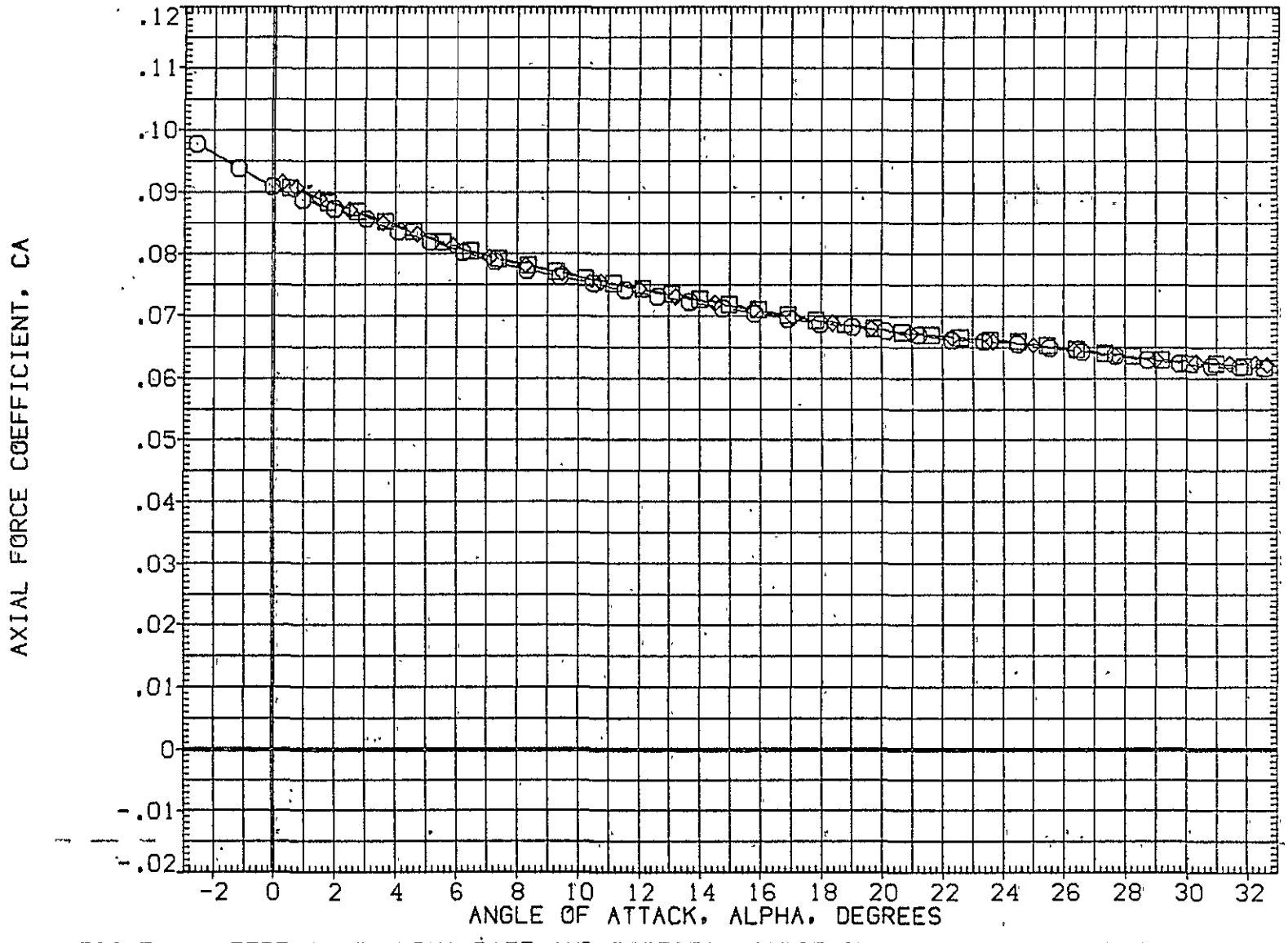


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

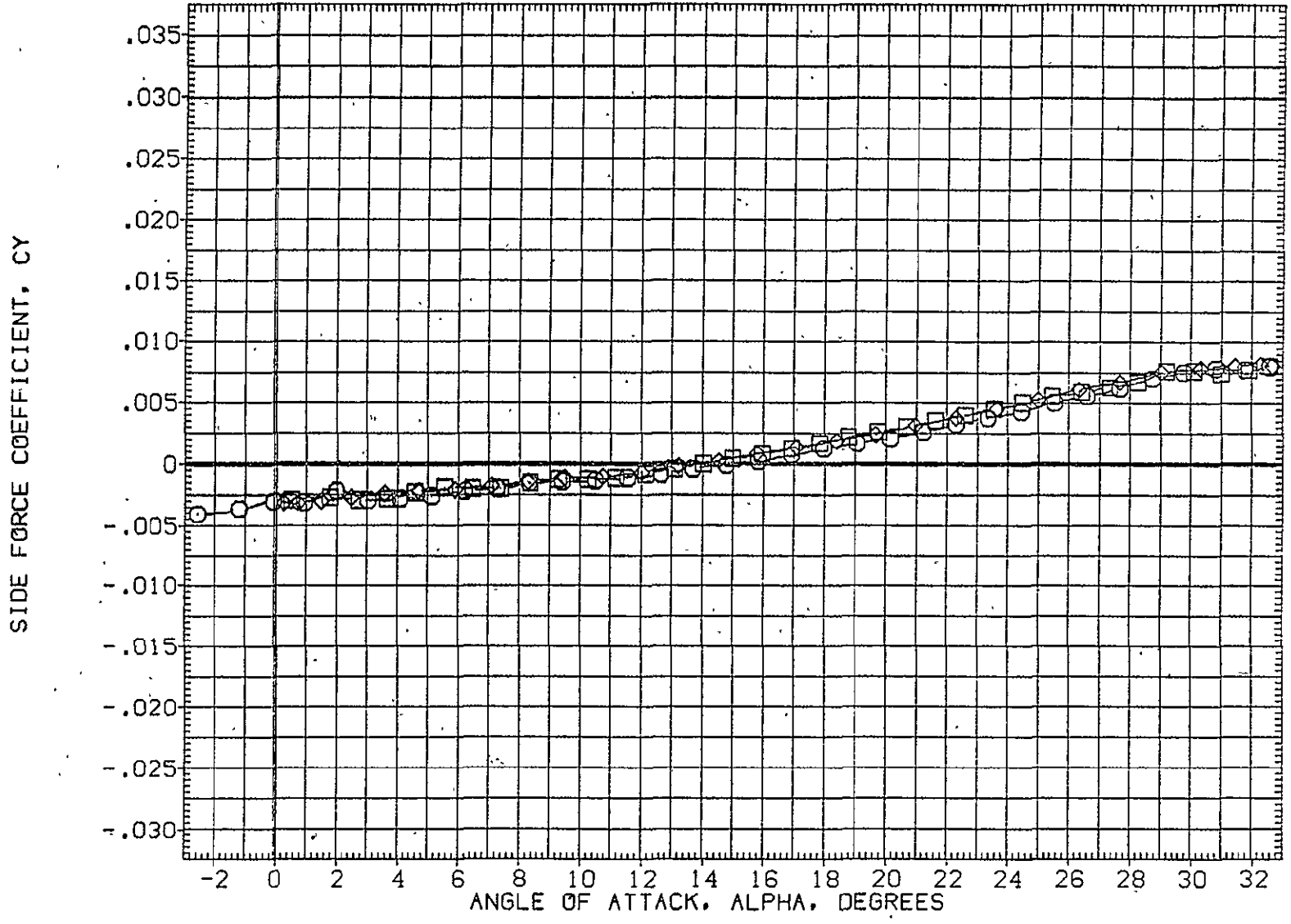


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

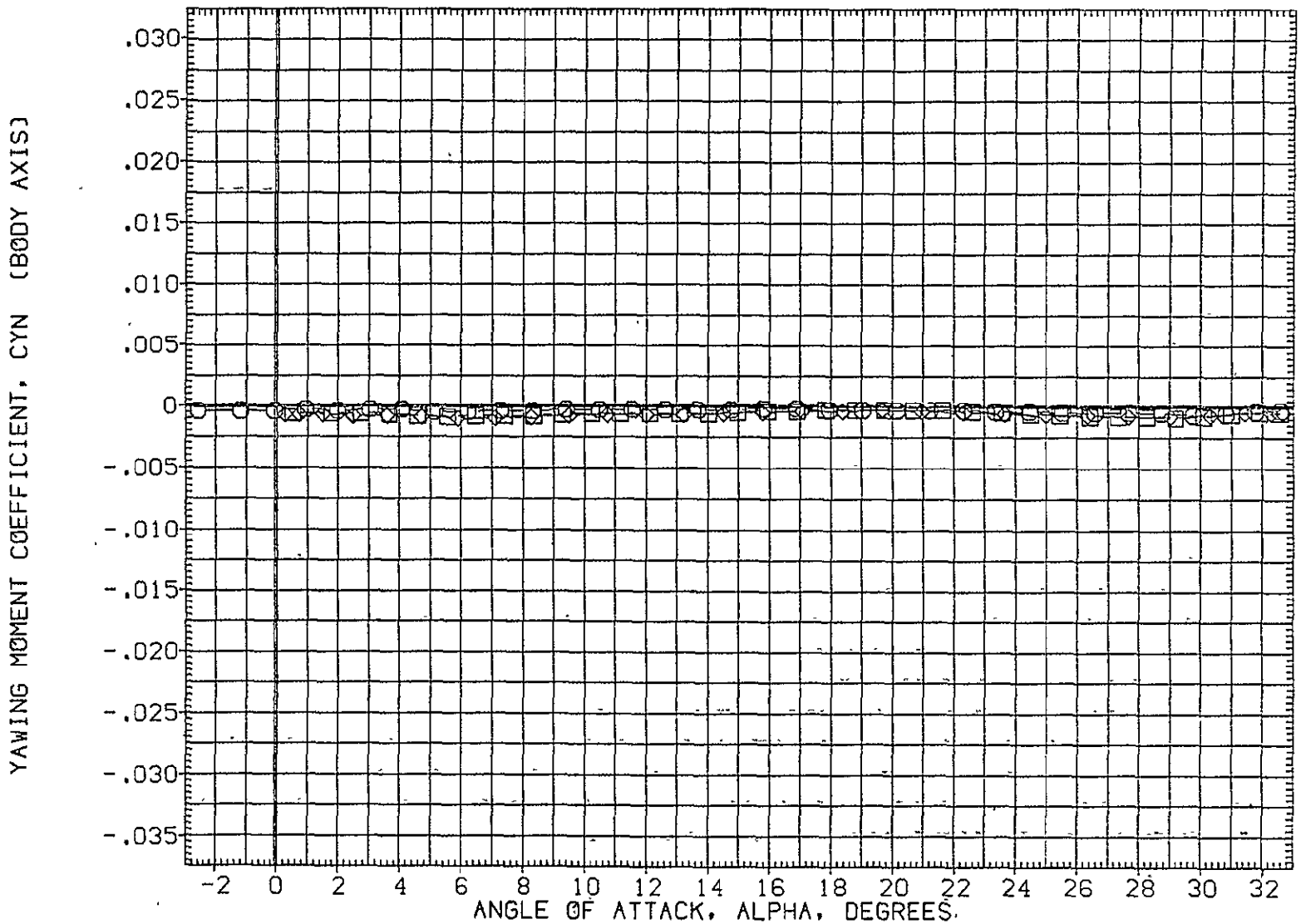


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

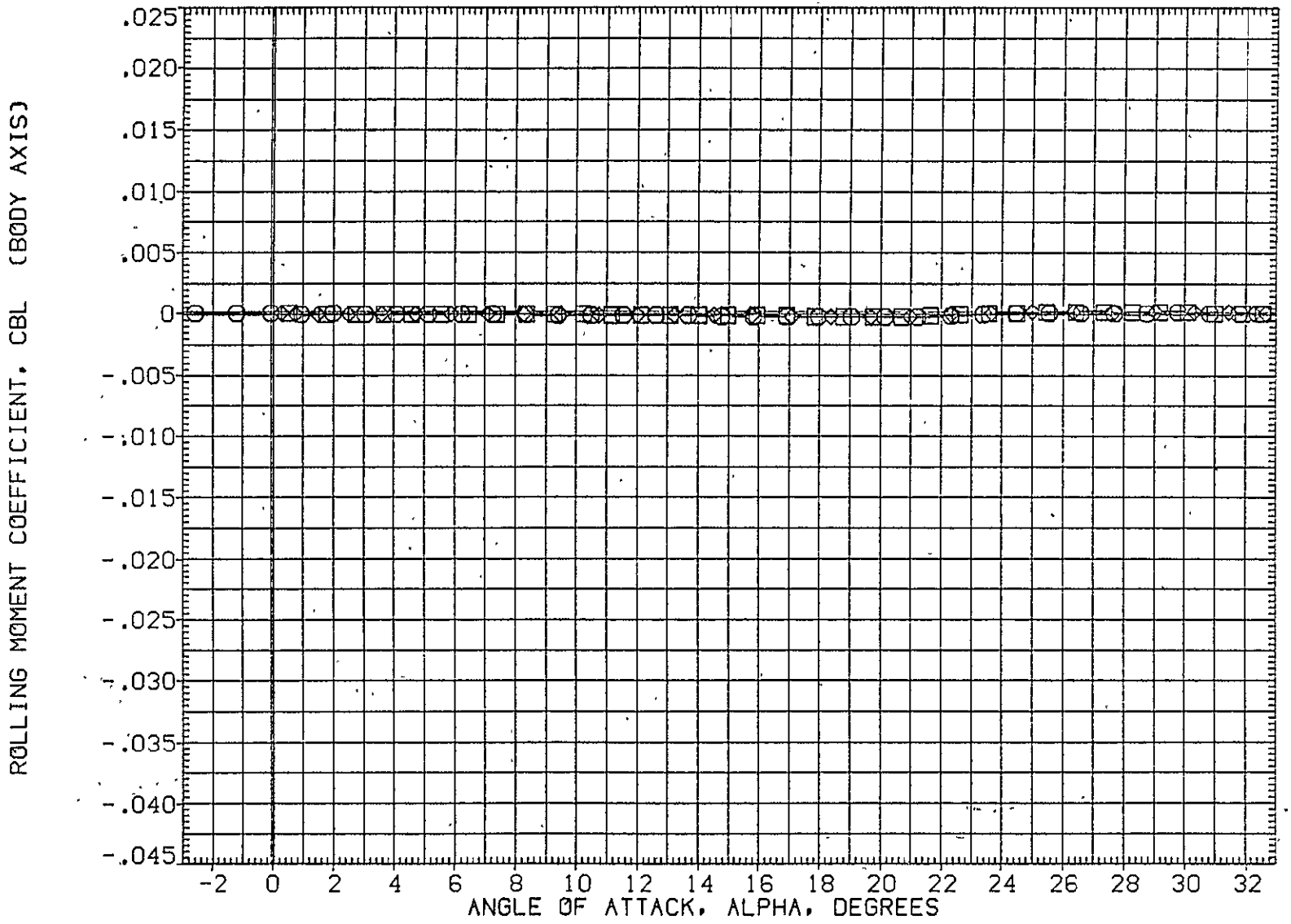


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY008)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY013)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY014)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

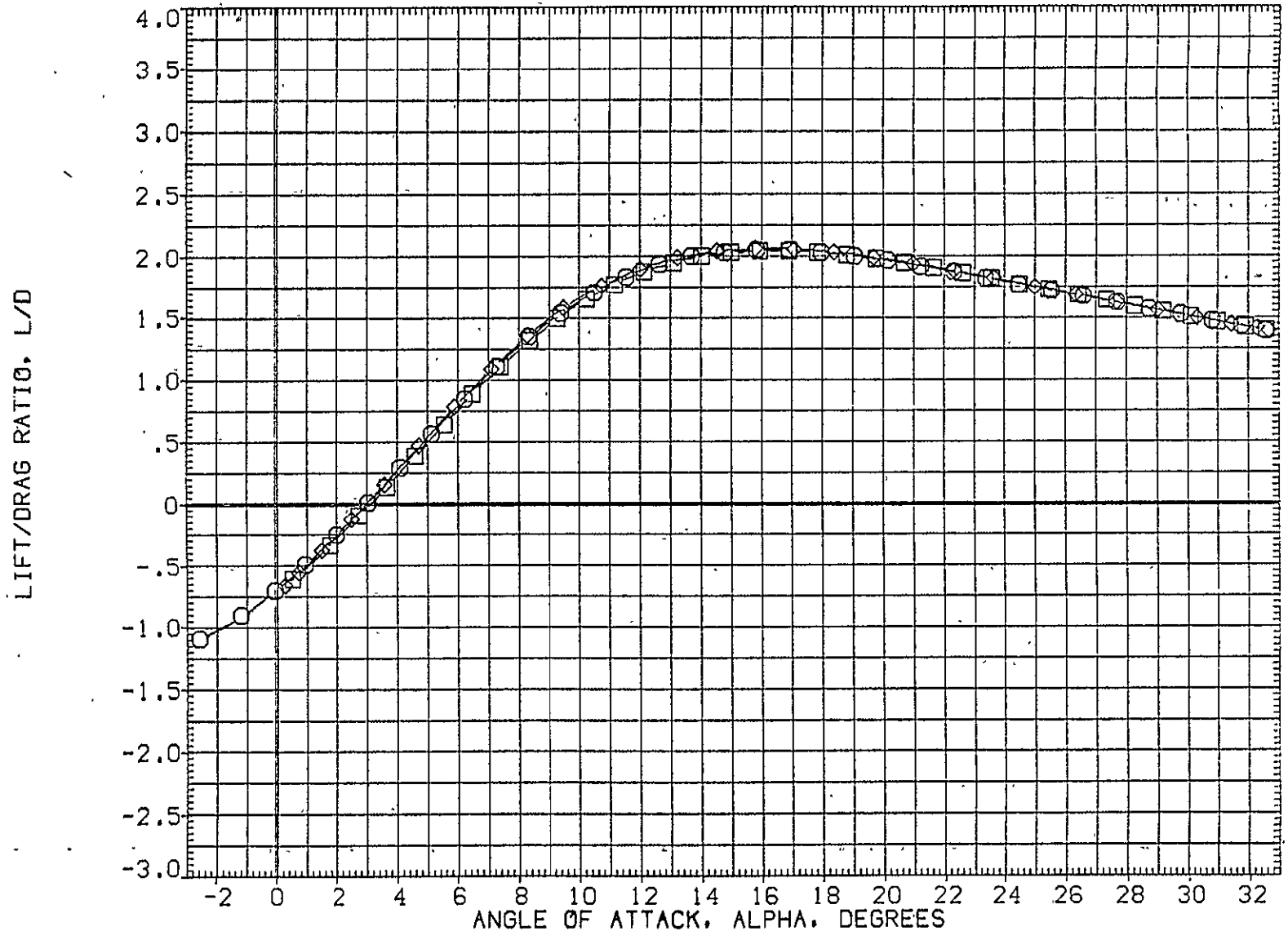


FIG 5 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

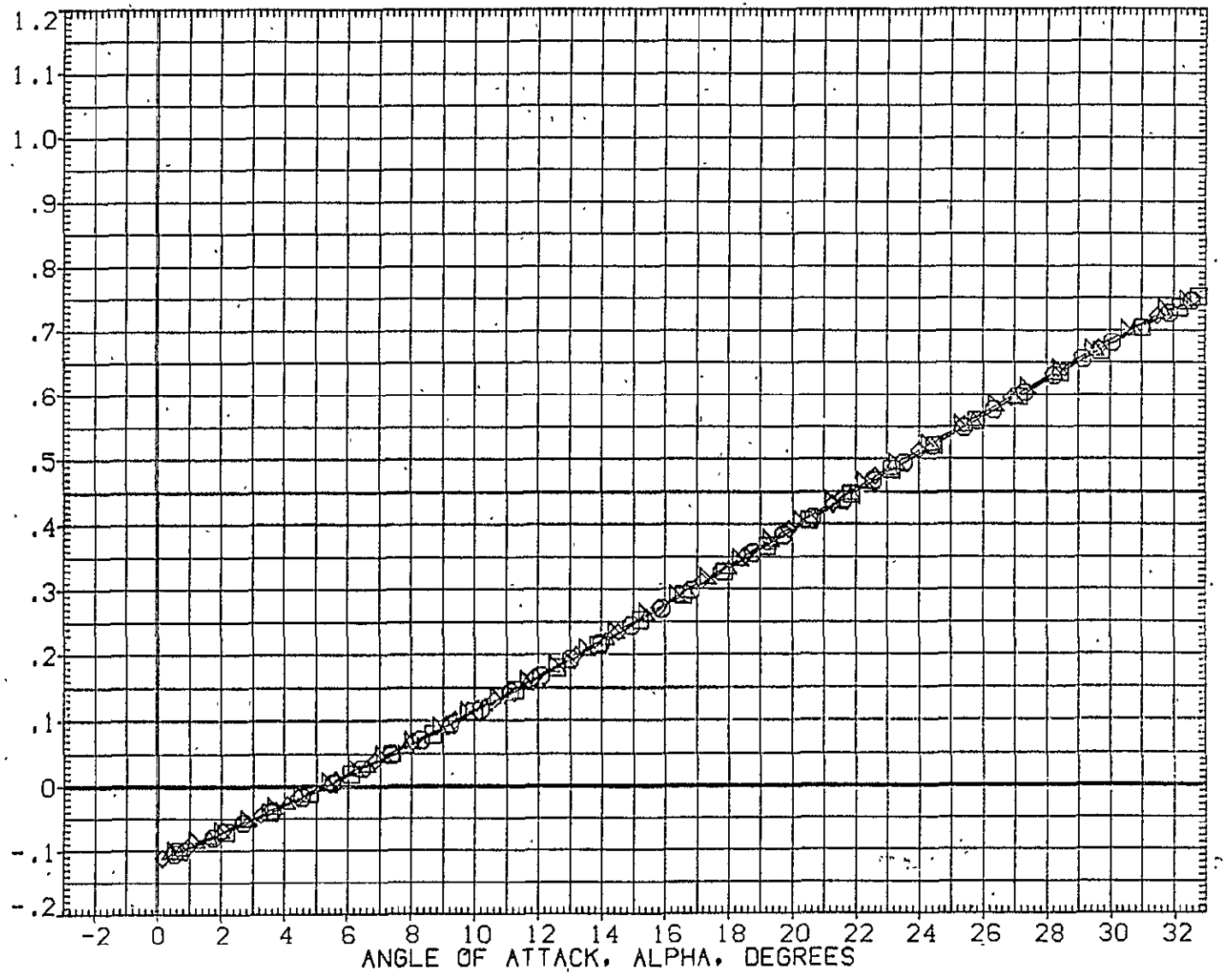


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

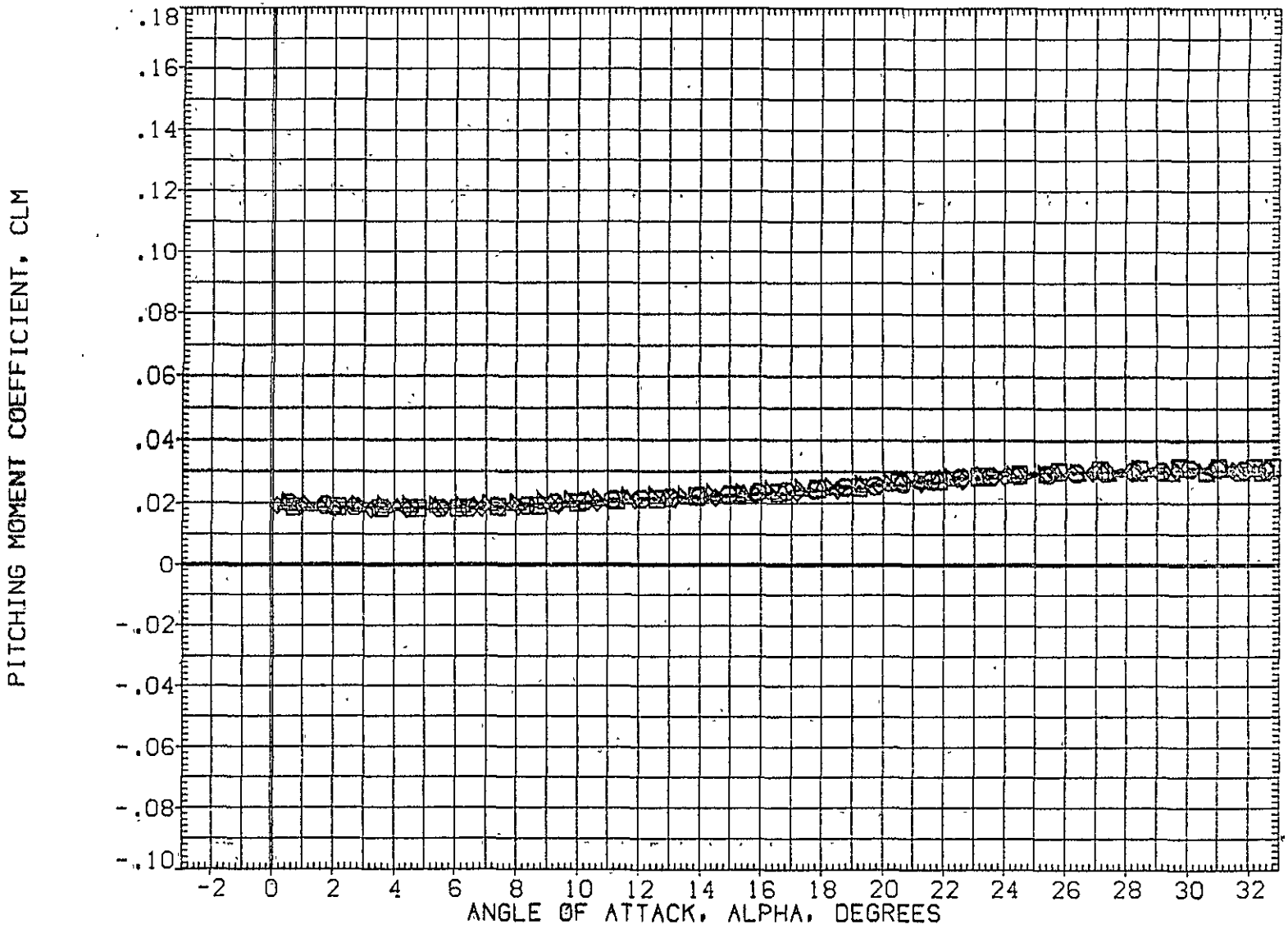


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

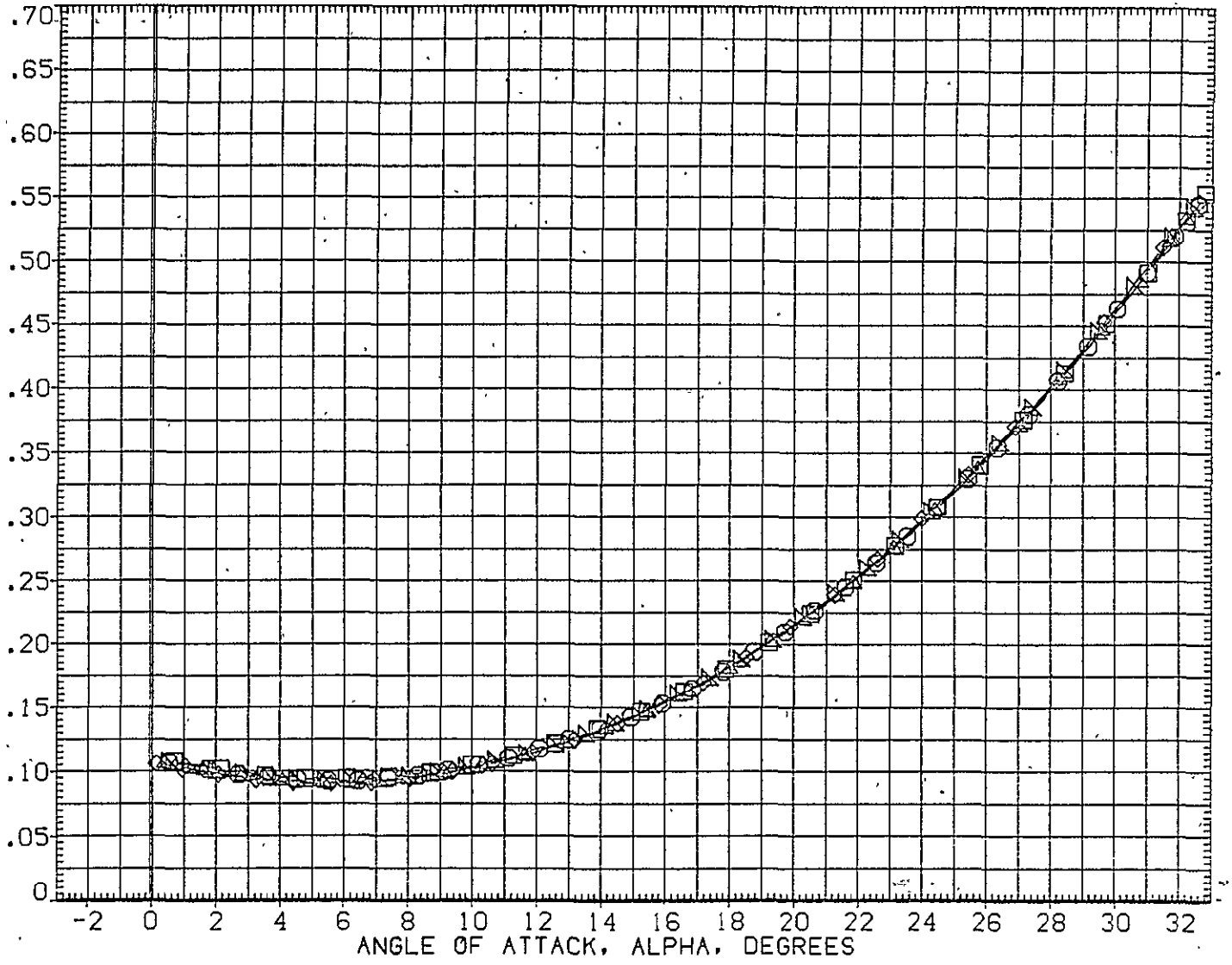


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

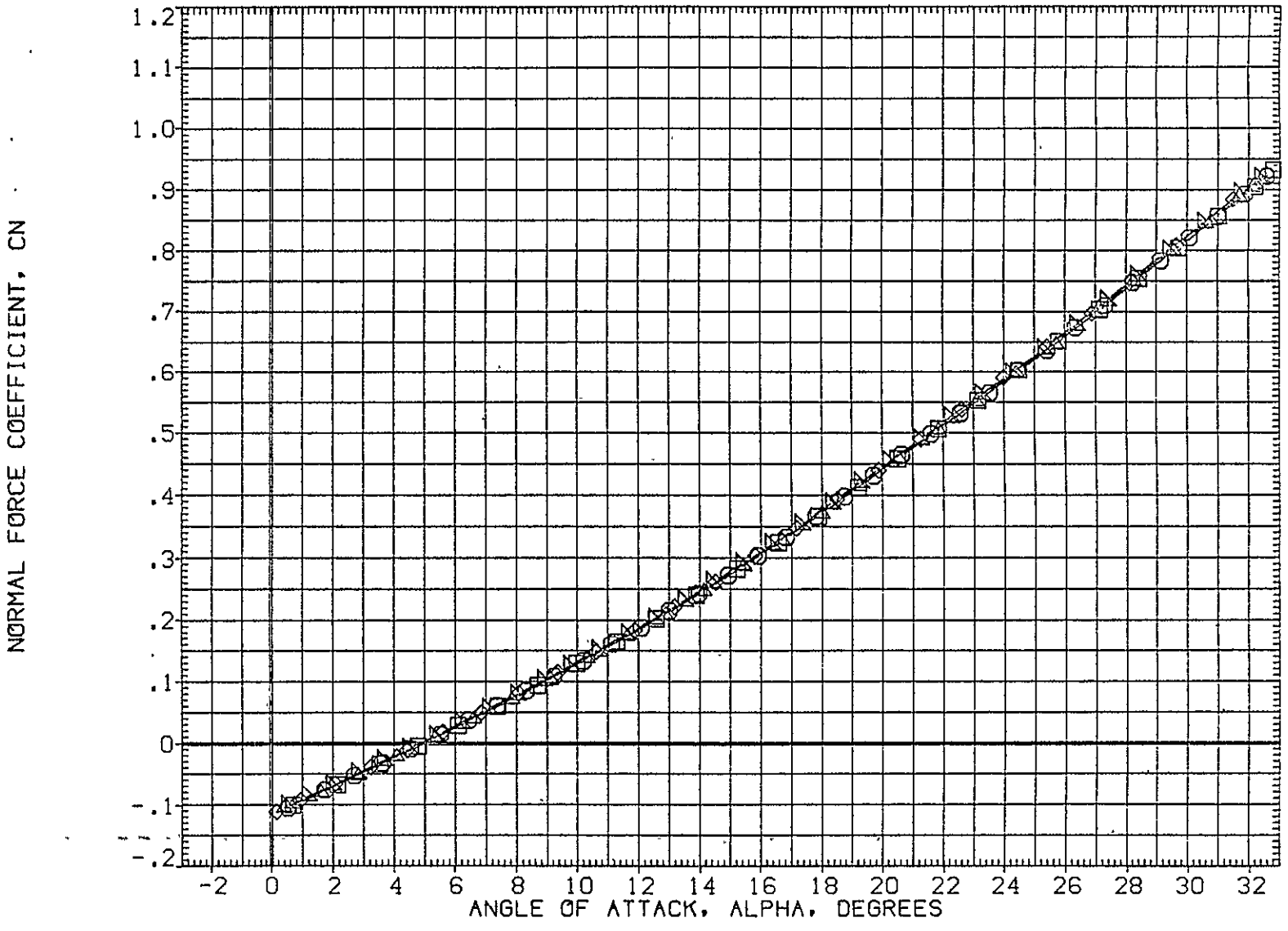


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

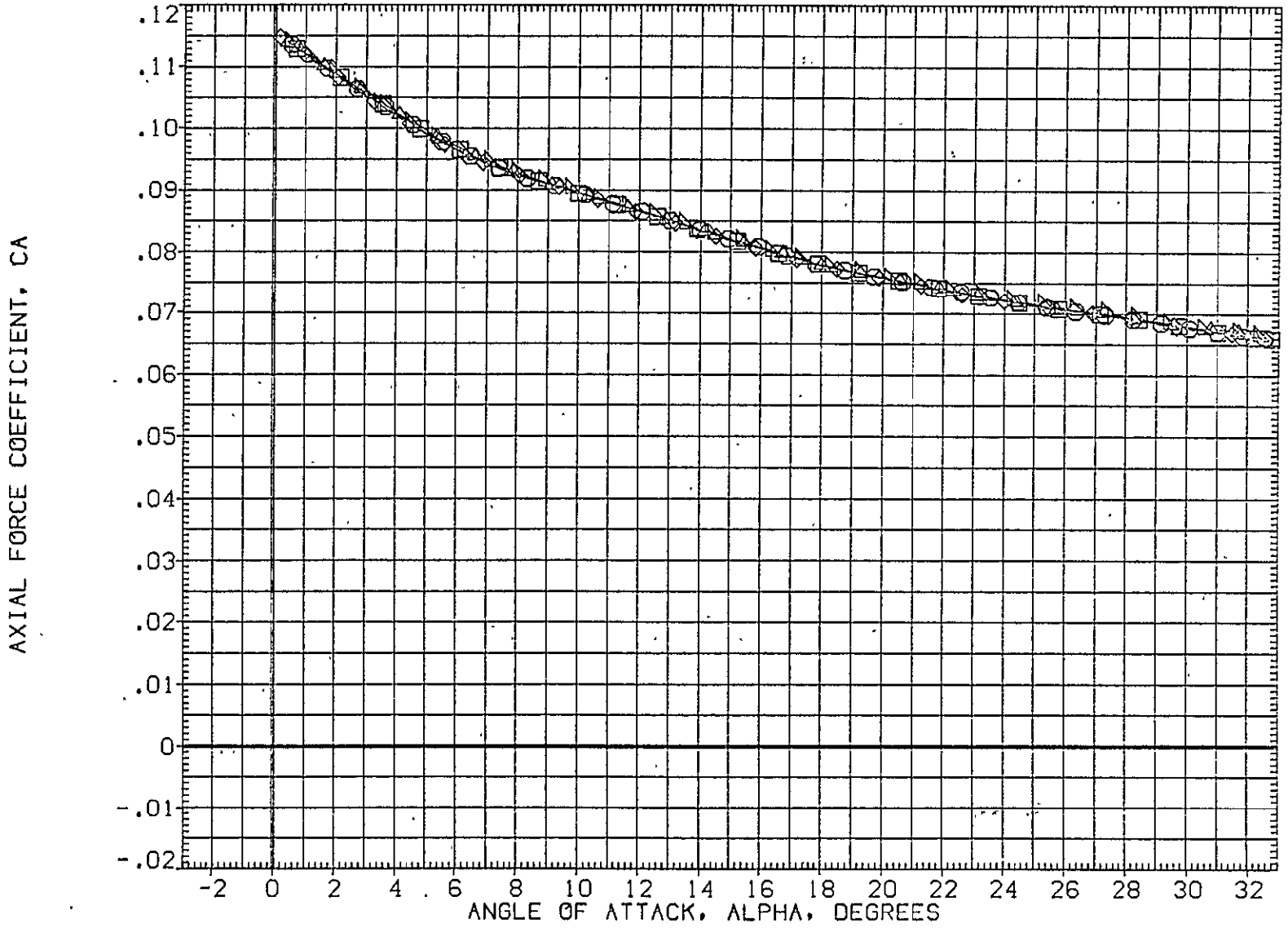


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

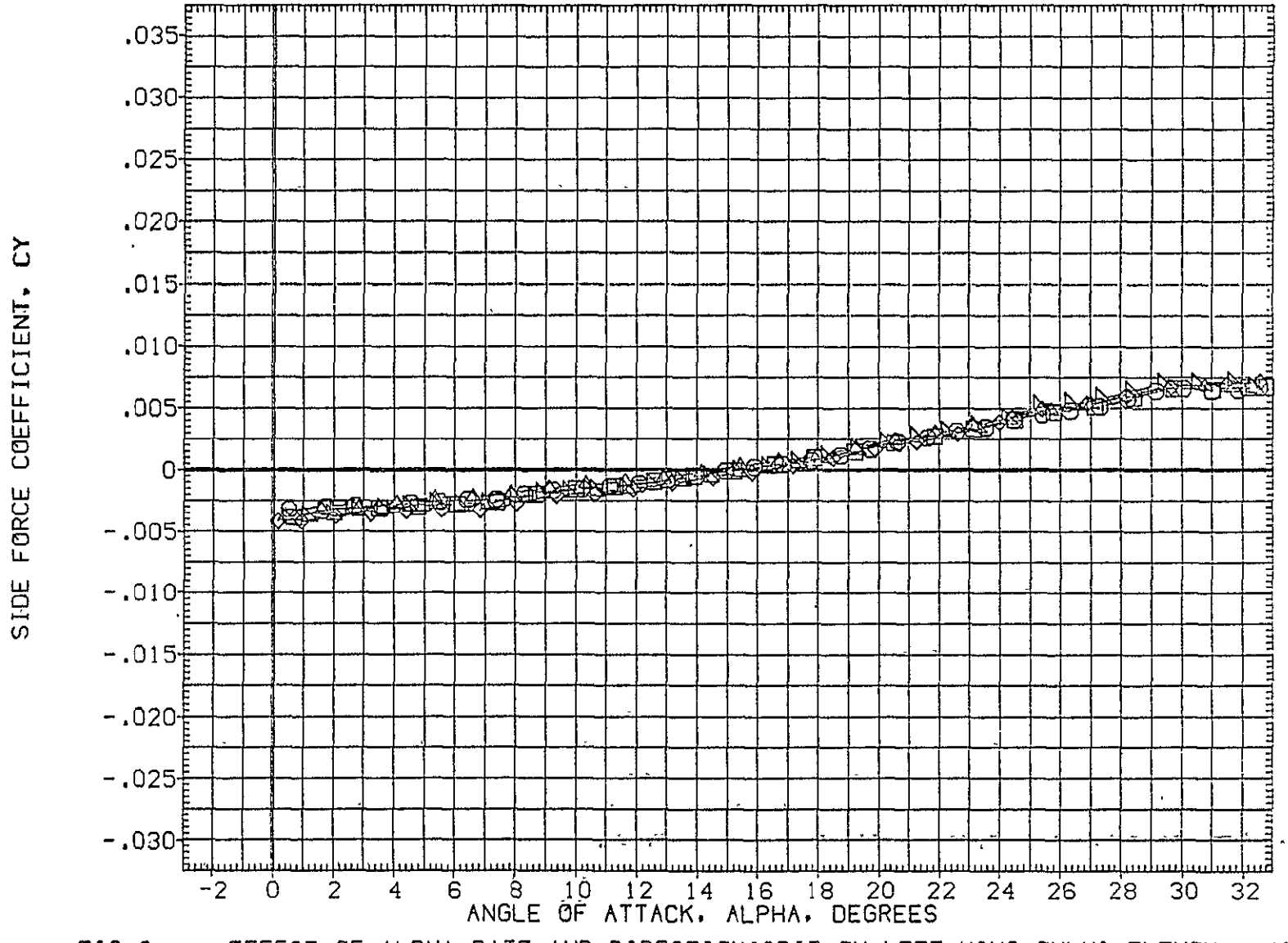


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY050)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	1.000
(RHY051)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	2.000	2.000
(RHY052)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	3.000	1.000
(RHY053)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

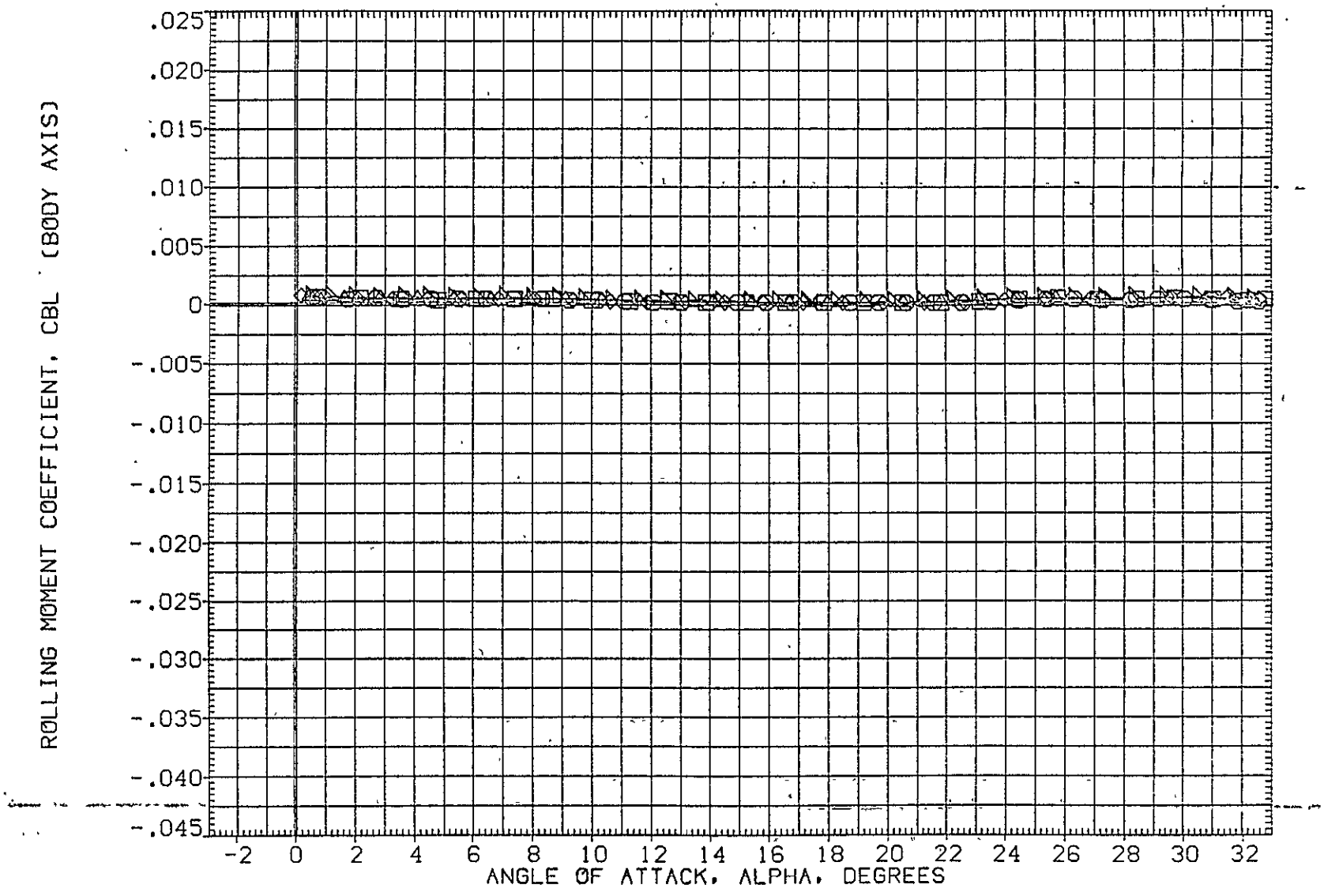


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	1.000	1.000
(RHY050)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	2.000	1.000
(RHY051)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	2.000	2.000
(RHY052)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	3.000	1.000
(RHY053)	▷	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

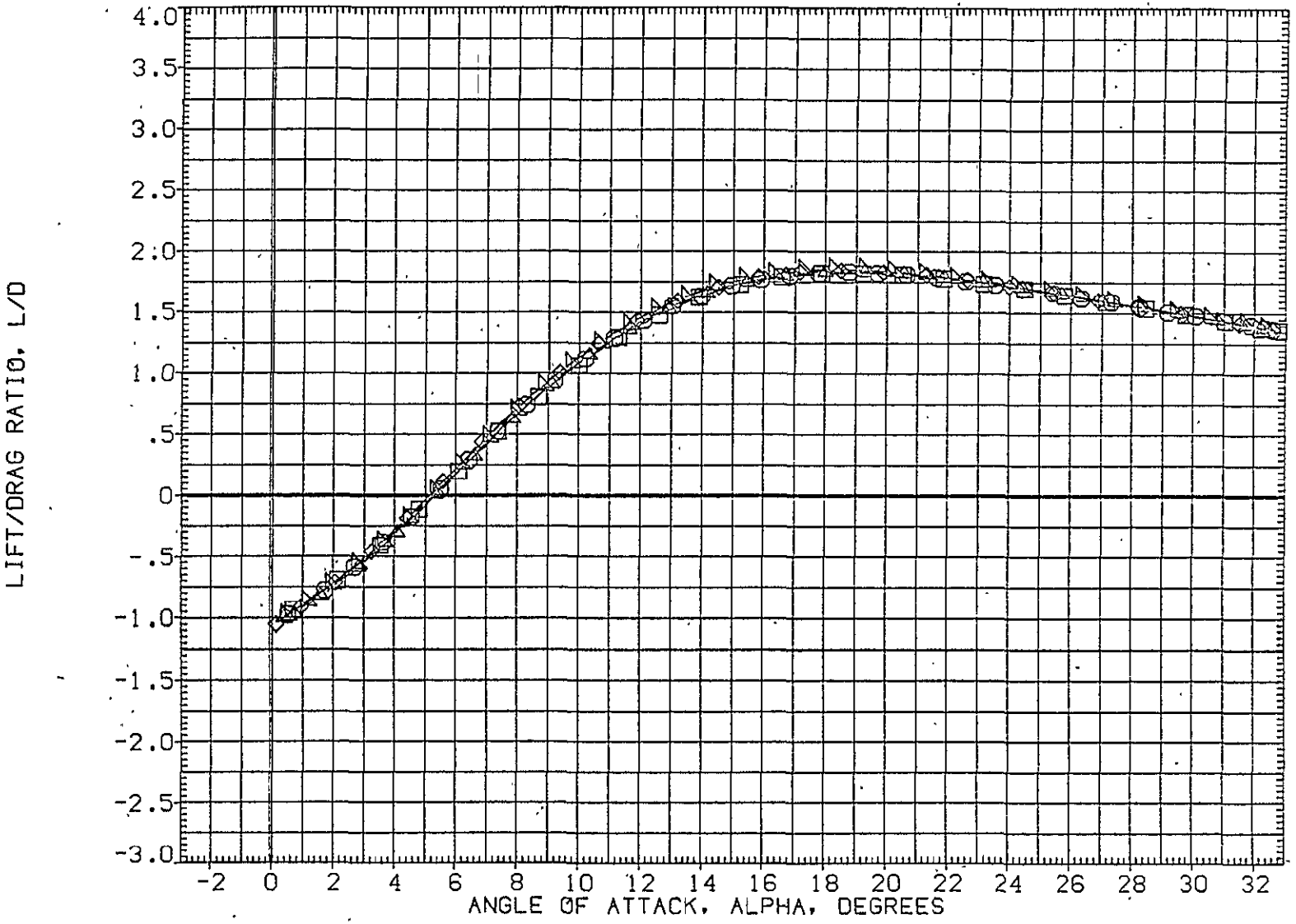


FIG 6 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	◁□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

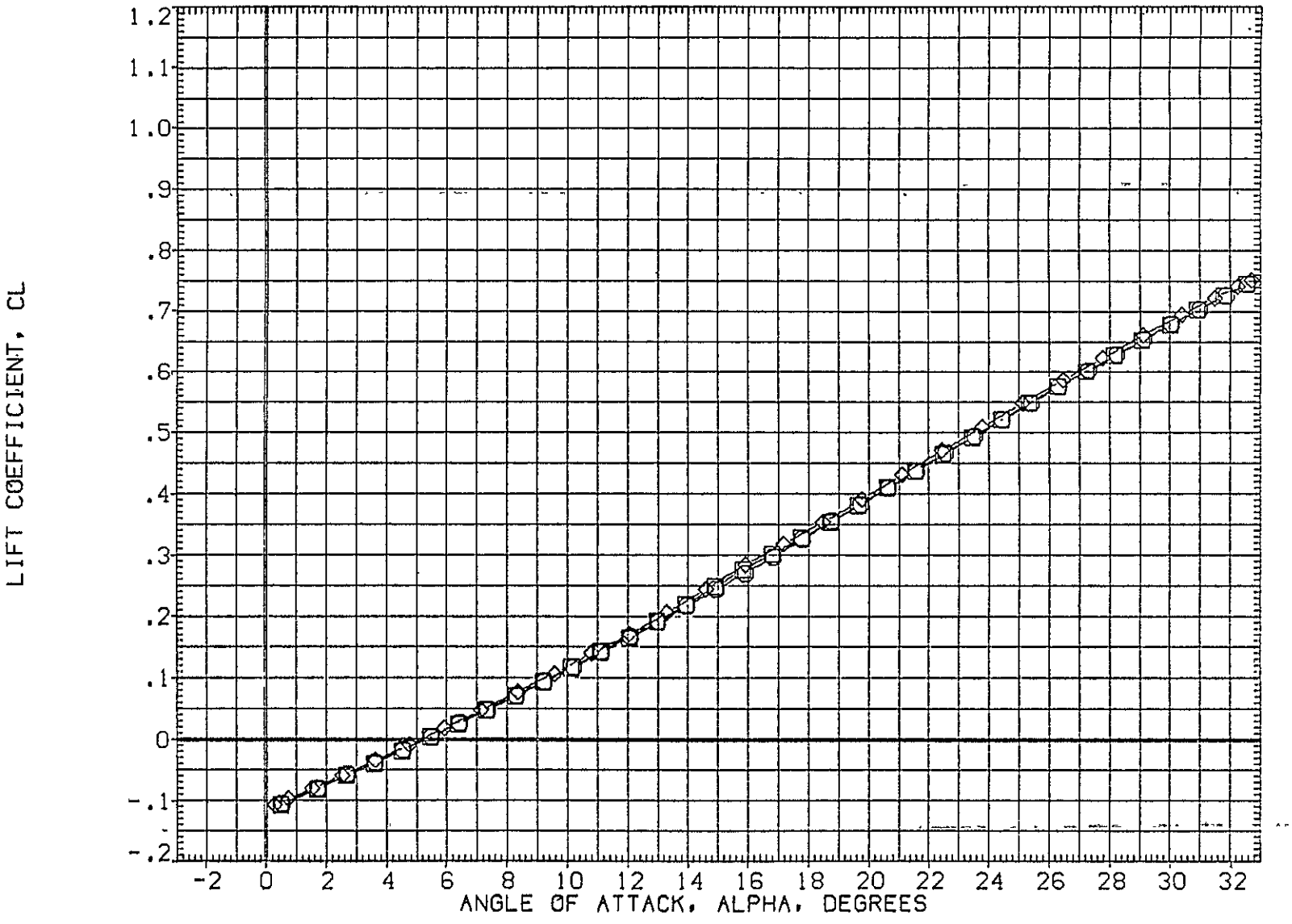


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFC)	-40.000	.000	1.000	1.000
(RHY054)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFC)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFC)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

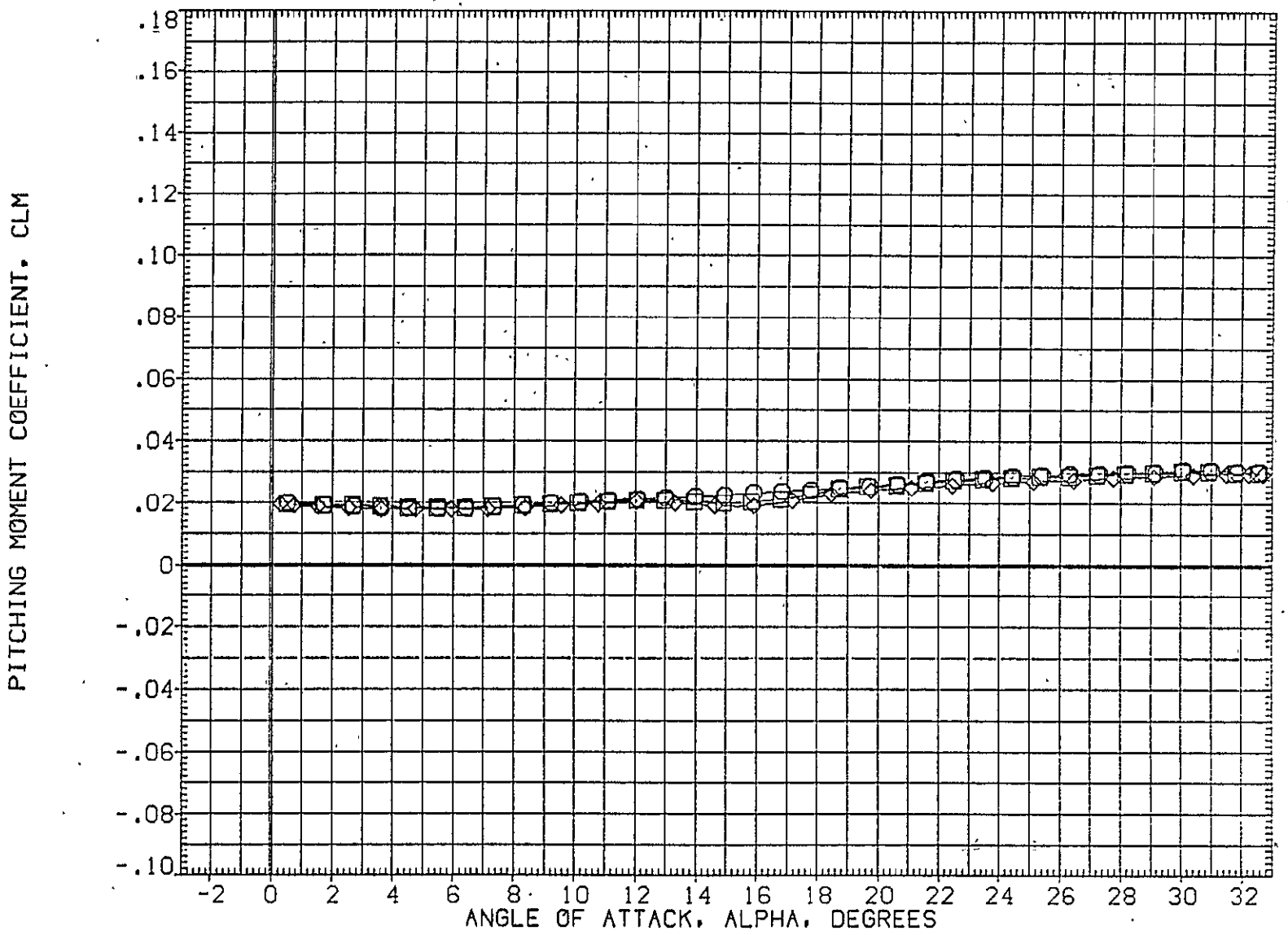


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

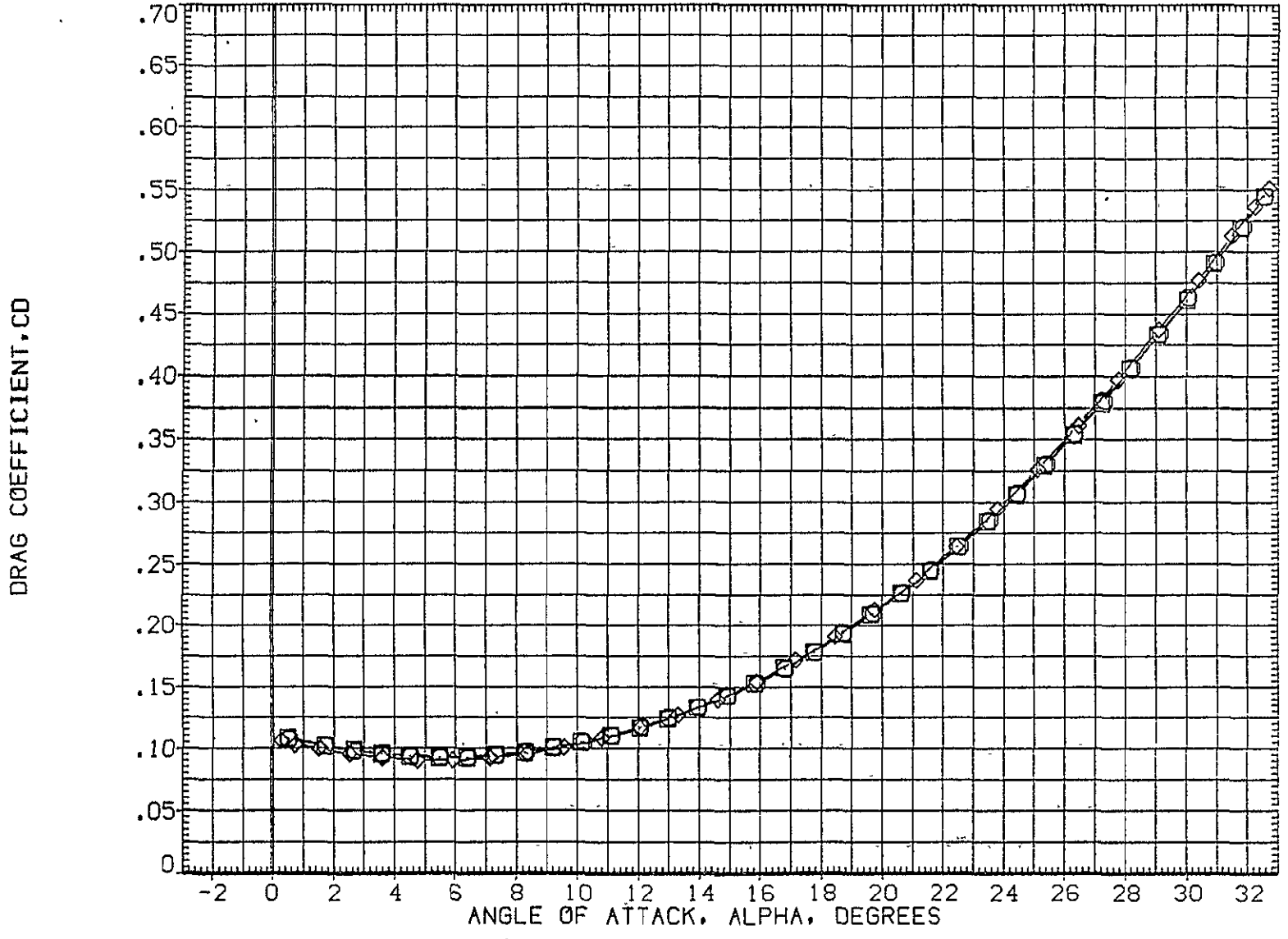


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

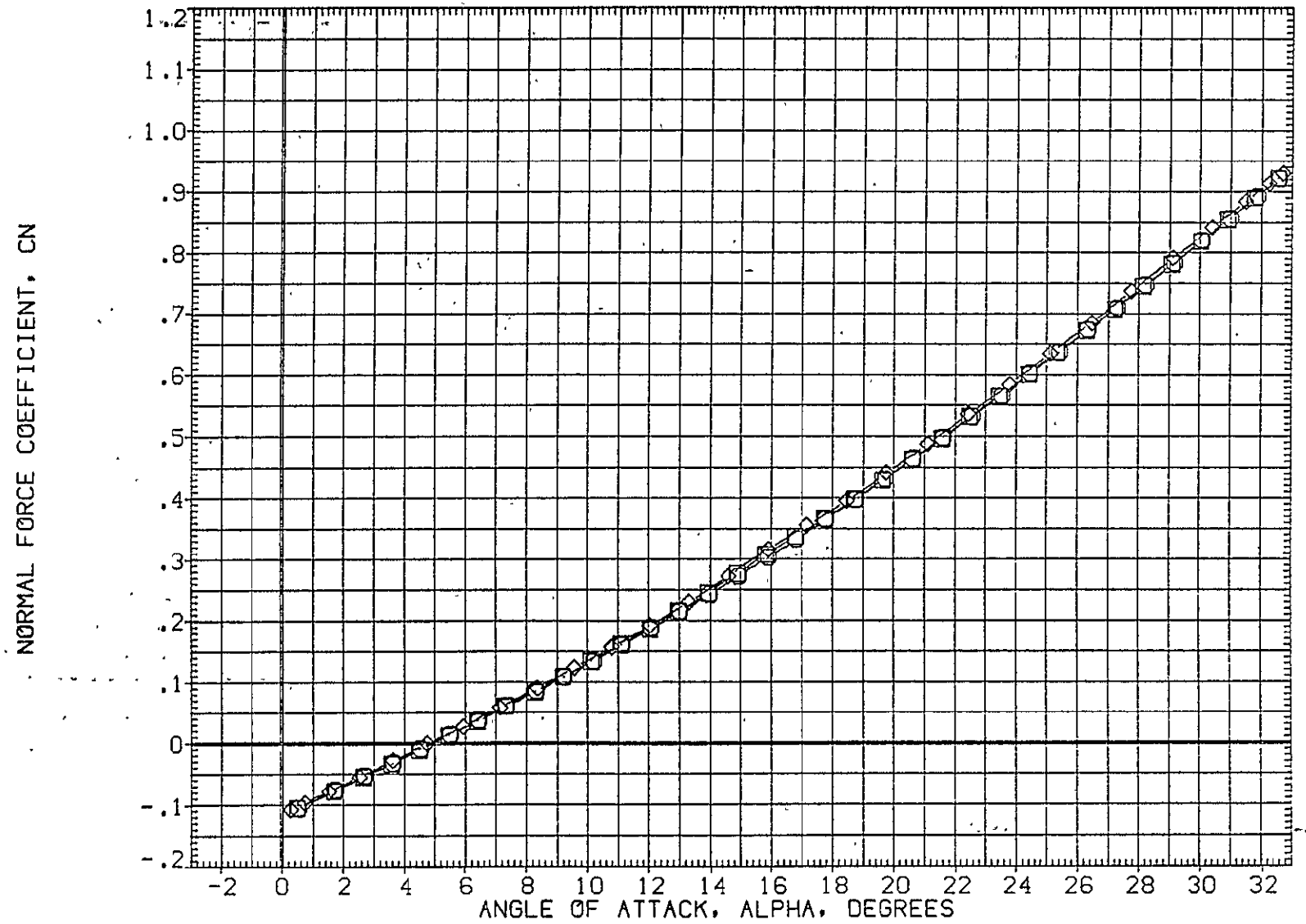


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

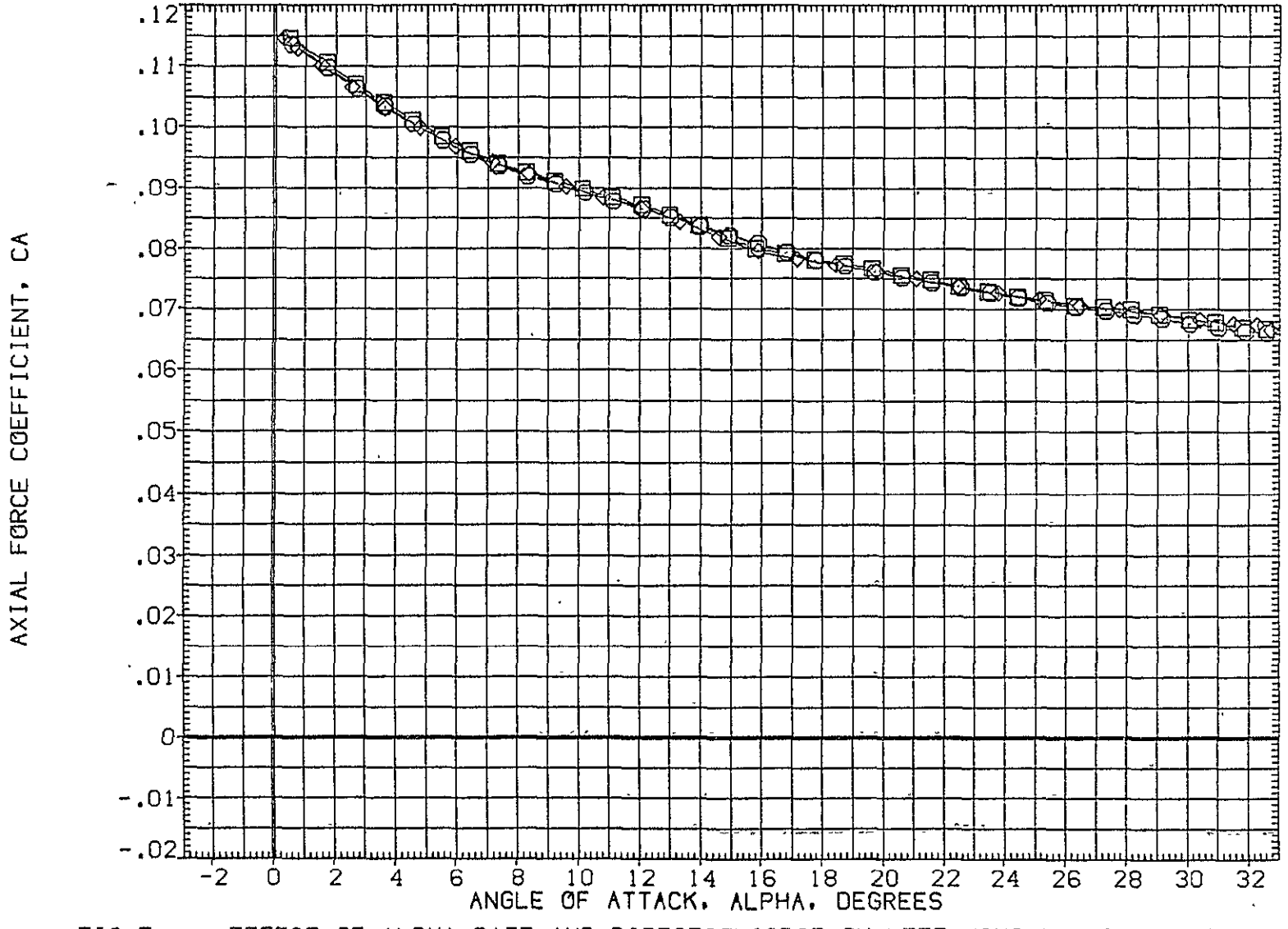


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	◁□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

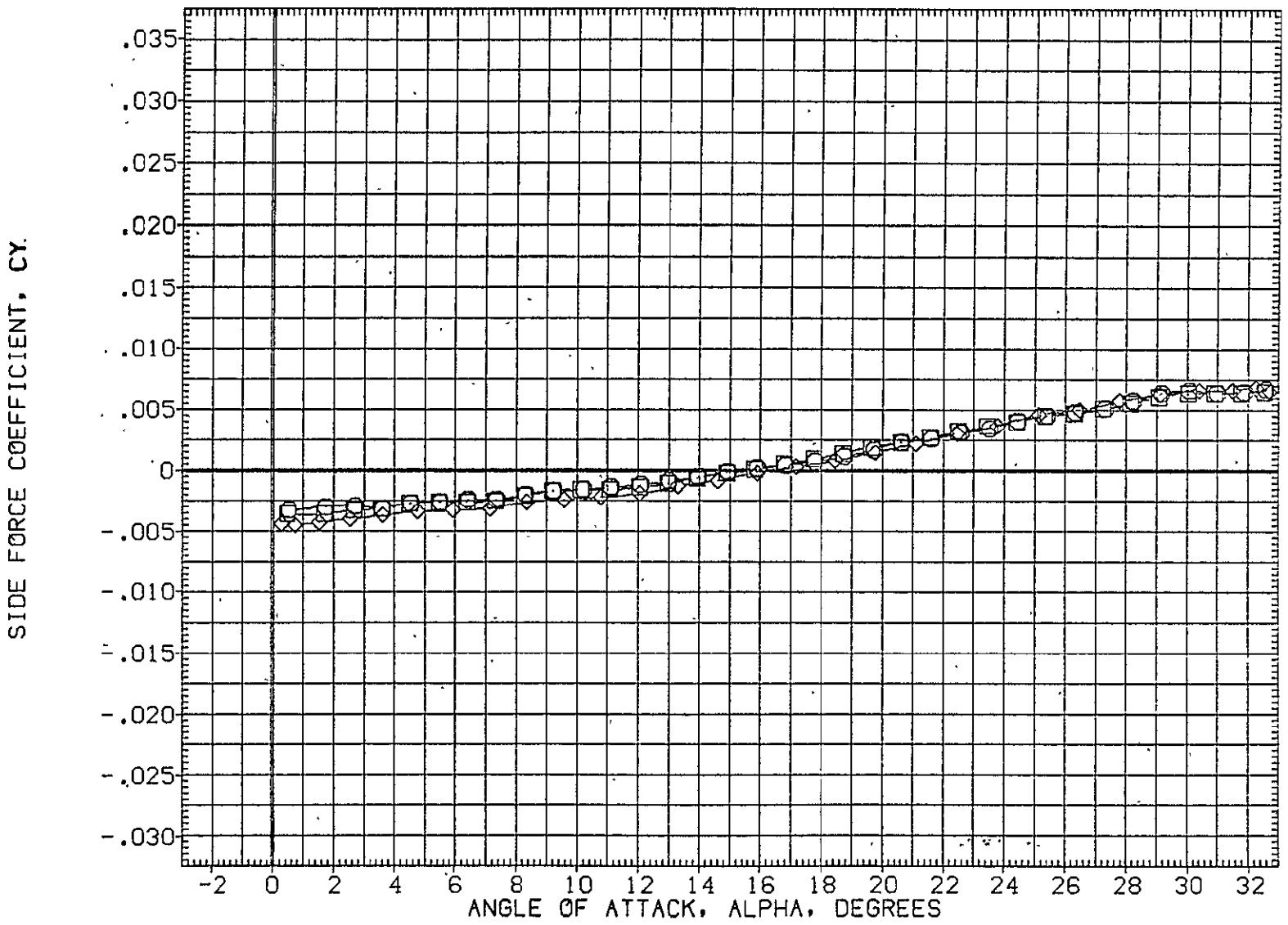


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -4

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

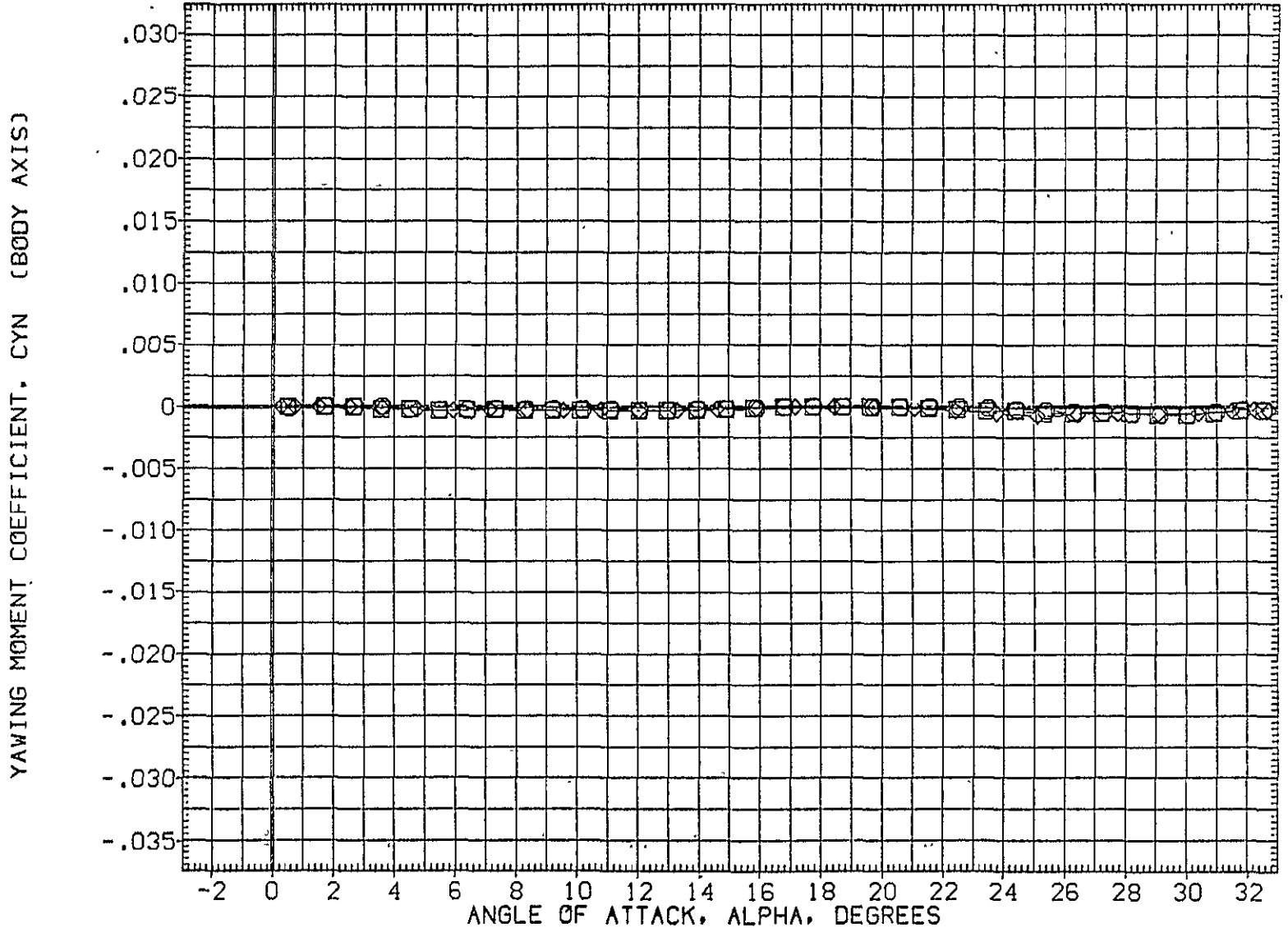


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

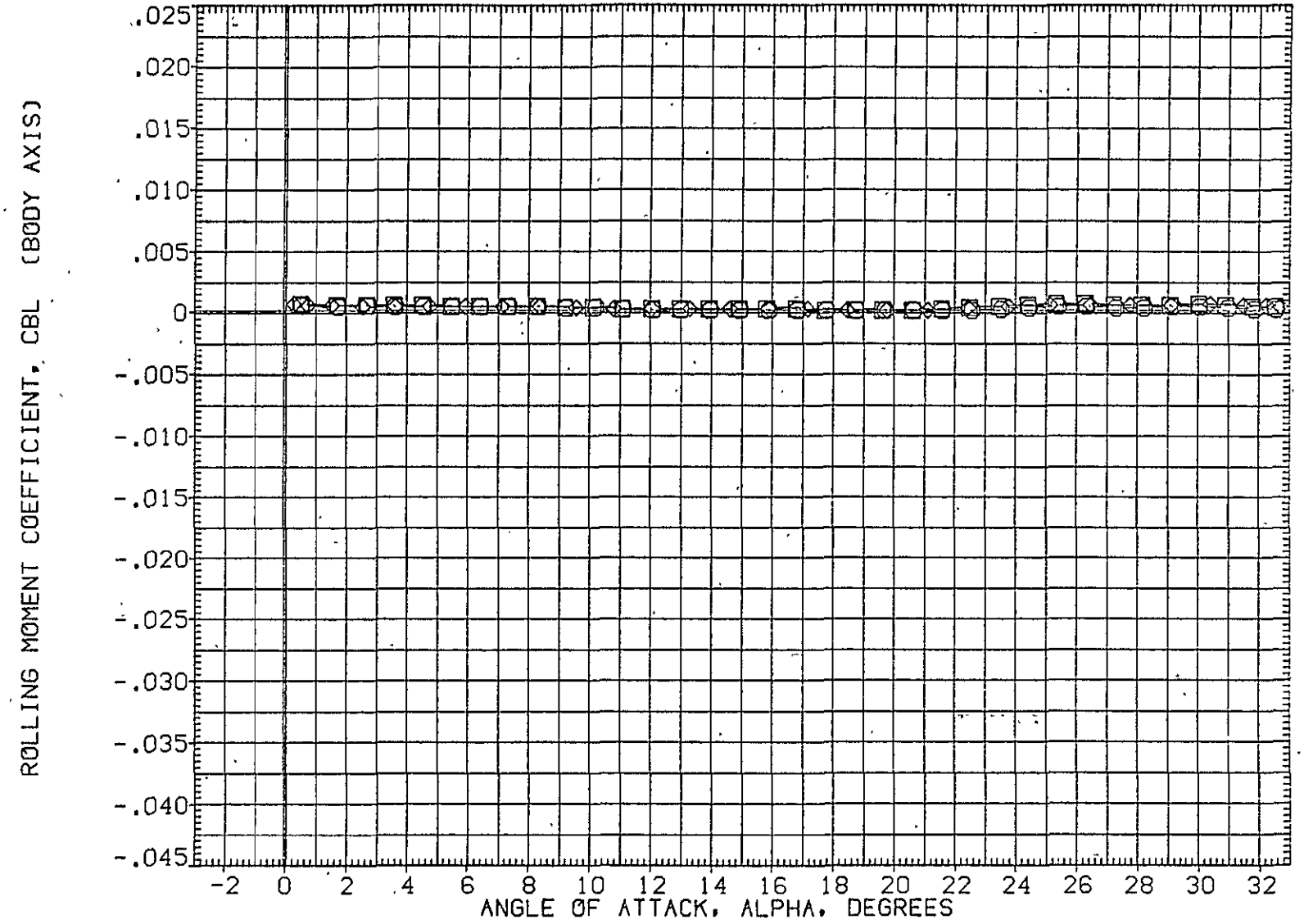


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ELEVON	AILRON	A-RATE	A-SCHD
(RHY049)	○	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	1.000	1.000
(RHY054)	□	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	6.000	1.000
(RHY055)	◇	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

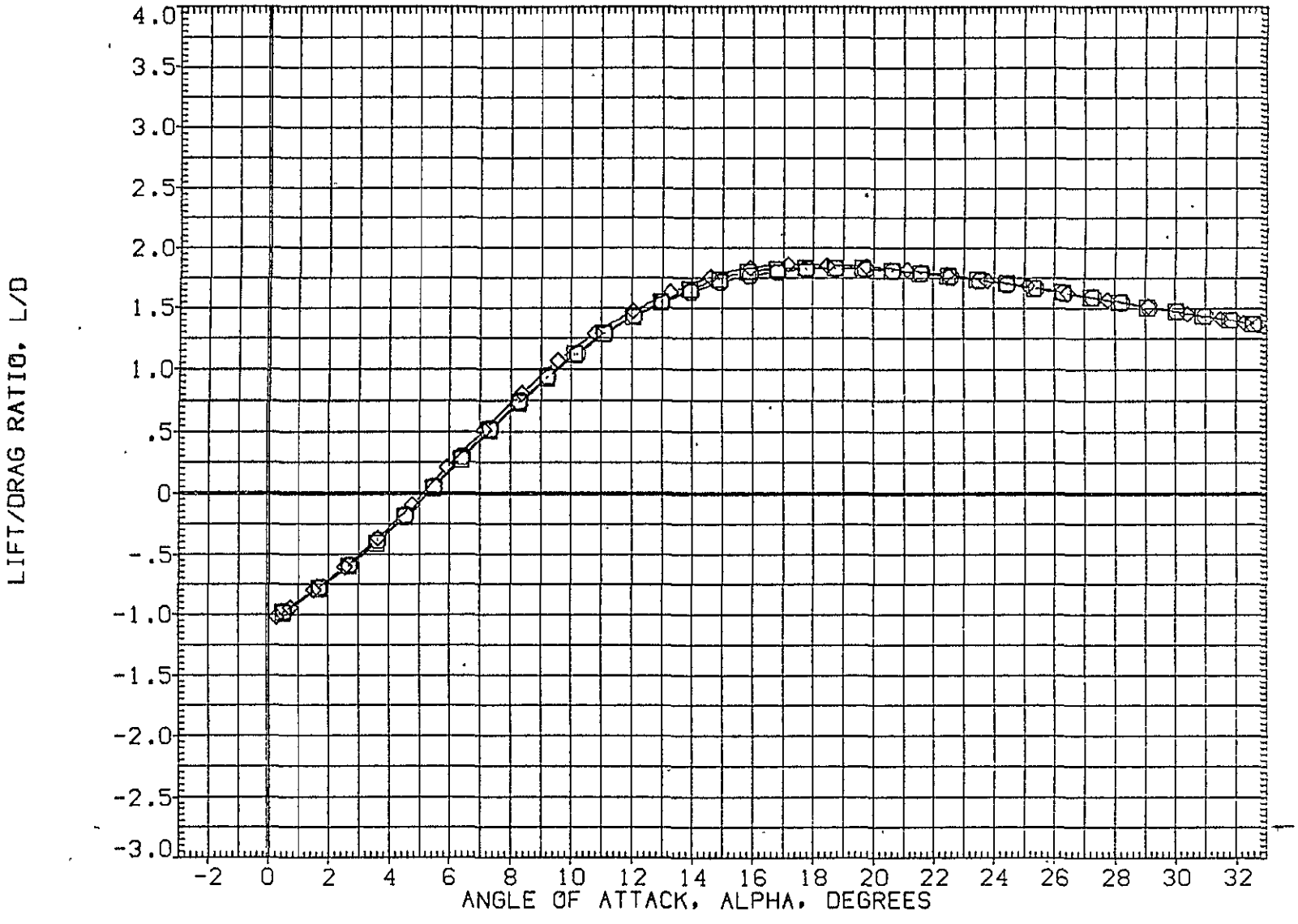


FIG 7 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -40

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

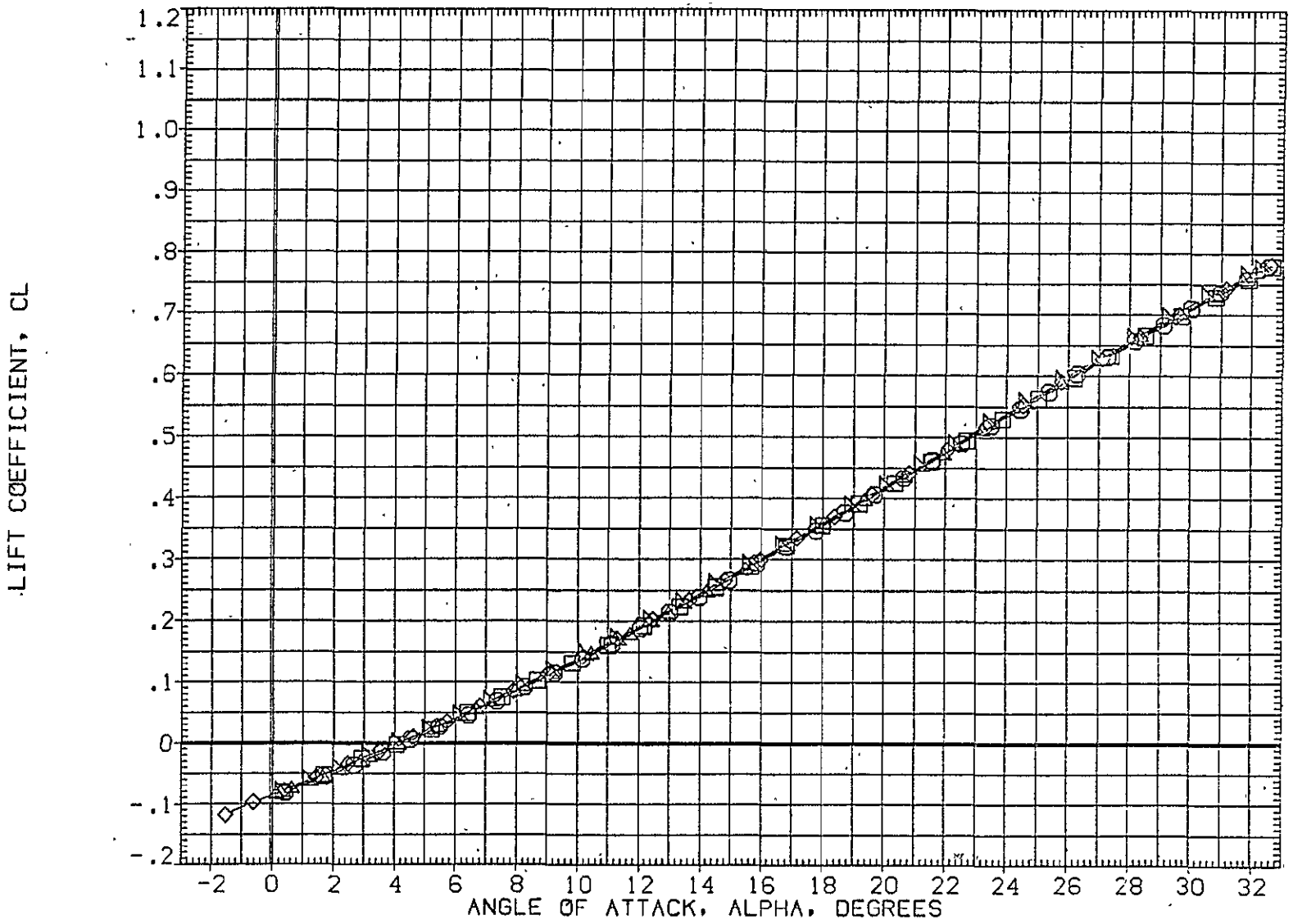


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

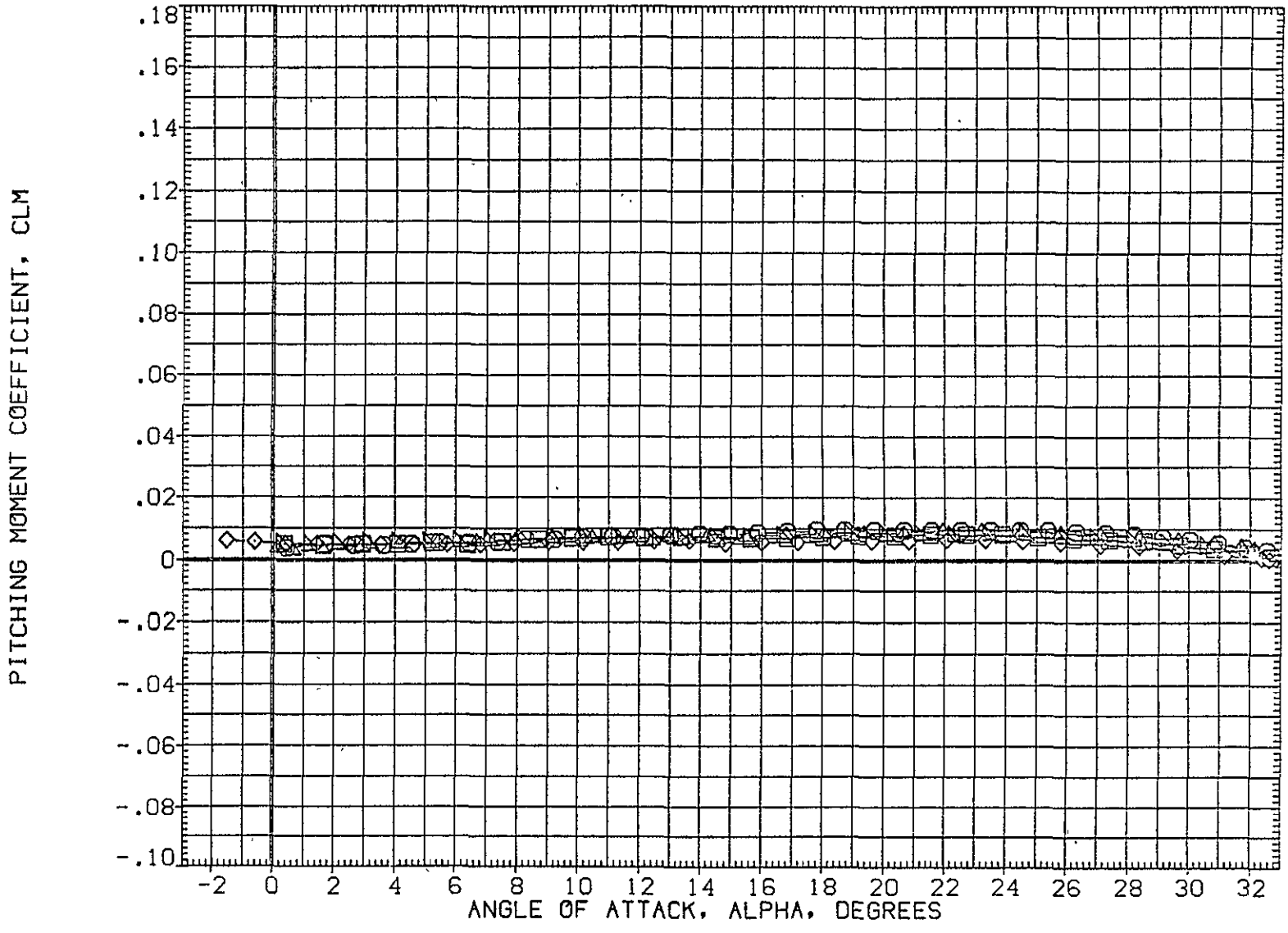


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

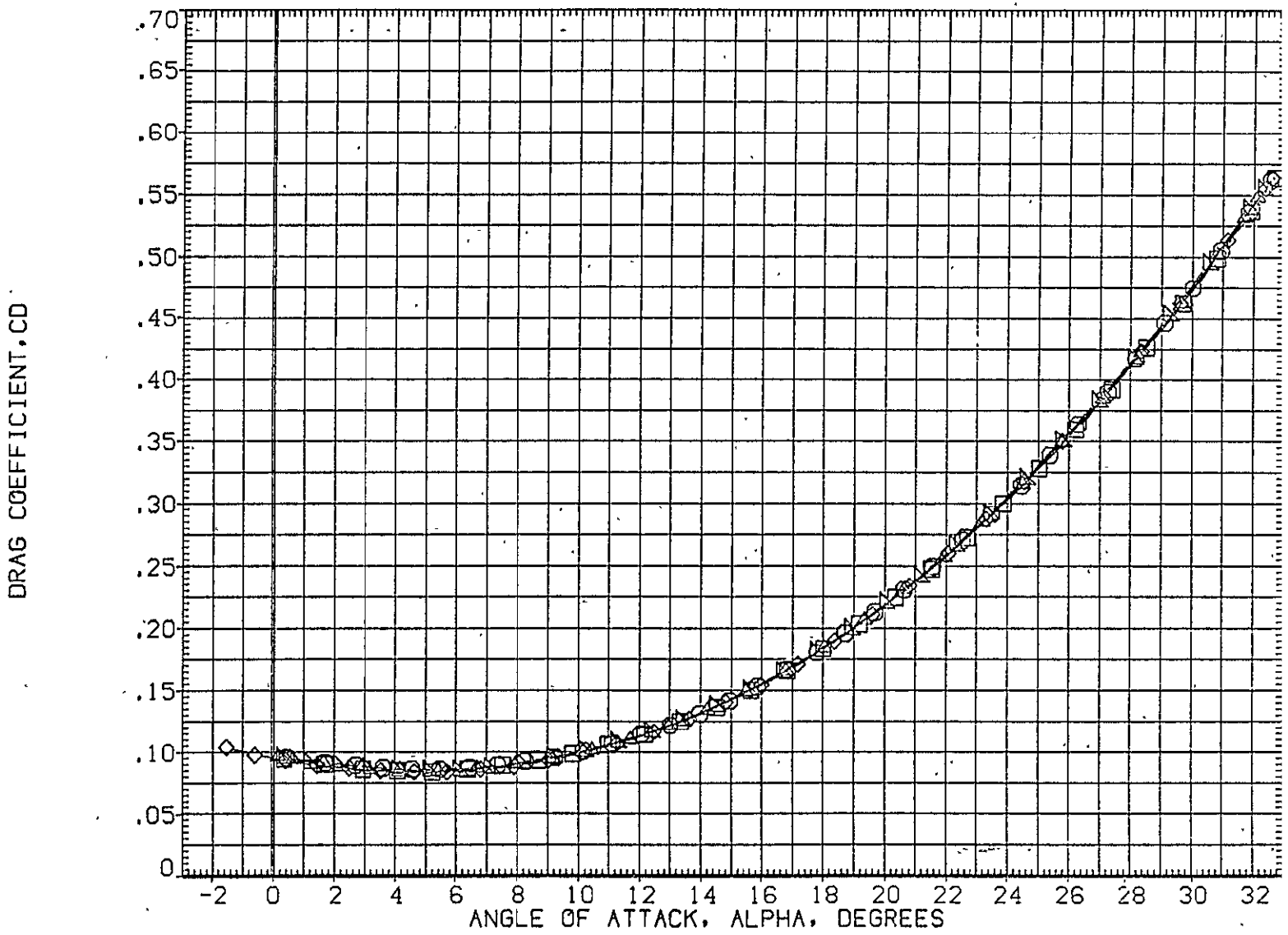


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO24)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHYO25)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHYO26)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHYO27)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHYO28)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

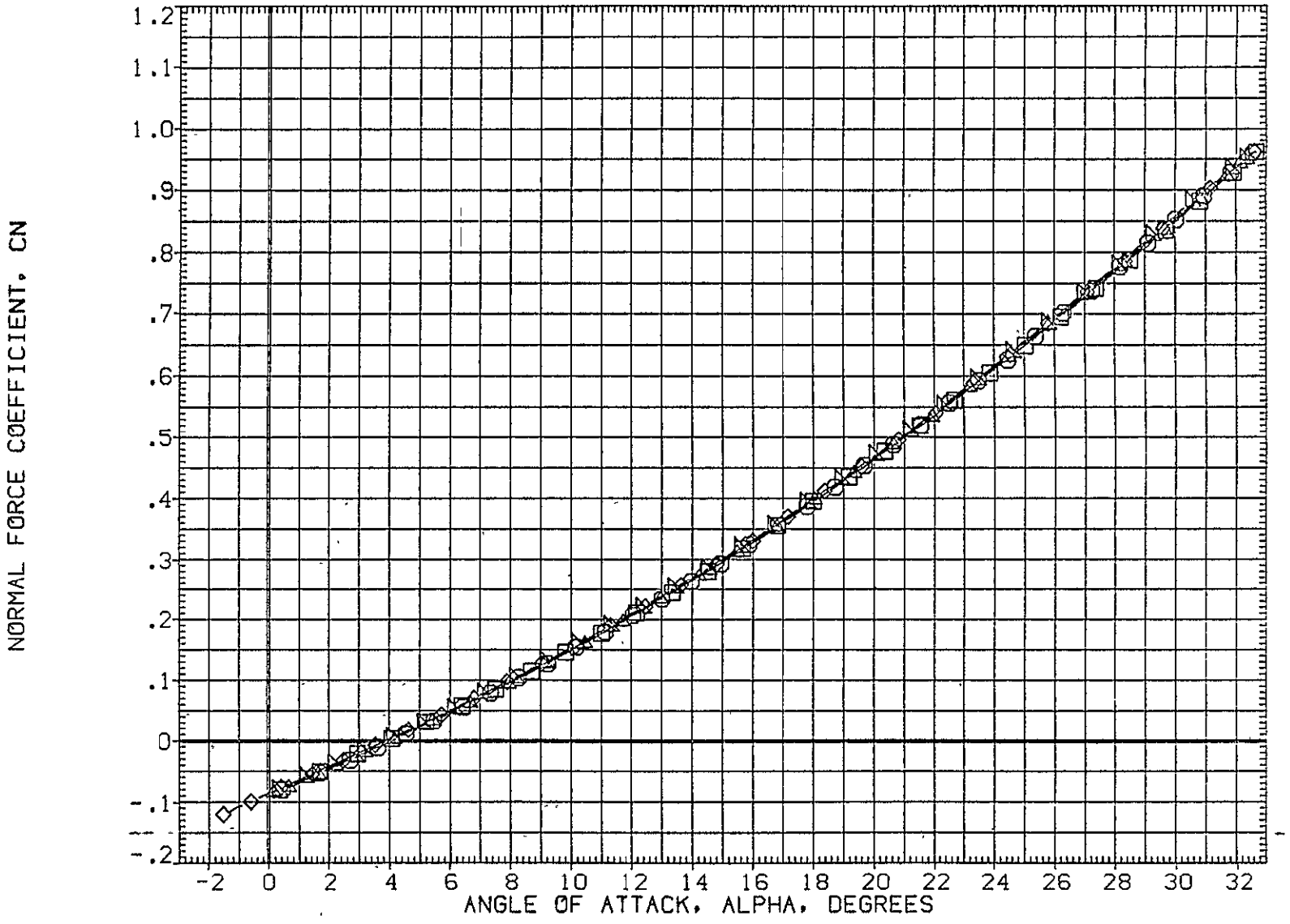


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

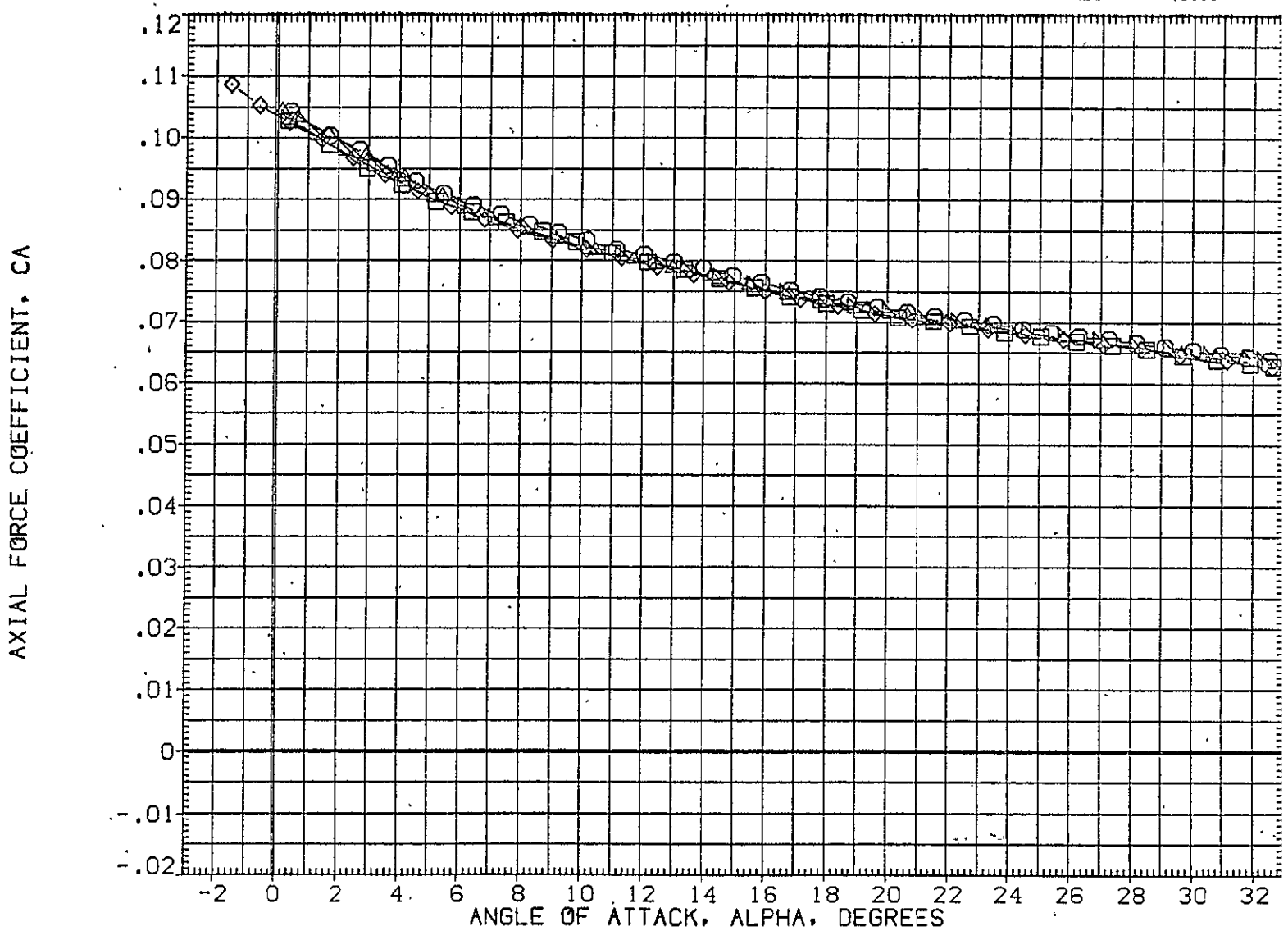


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH. = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

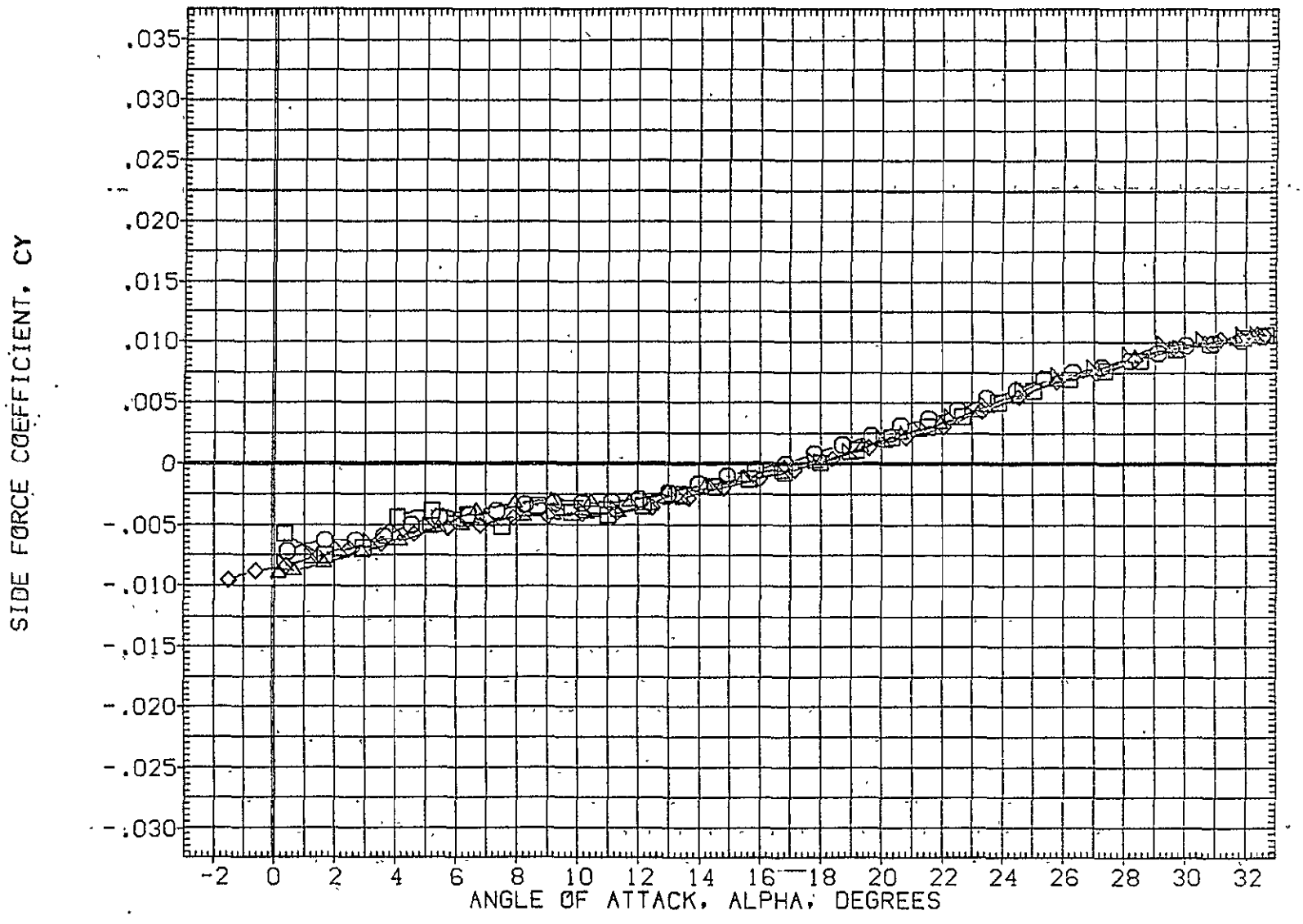


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

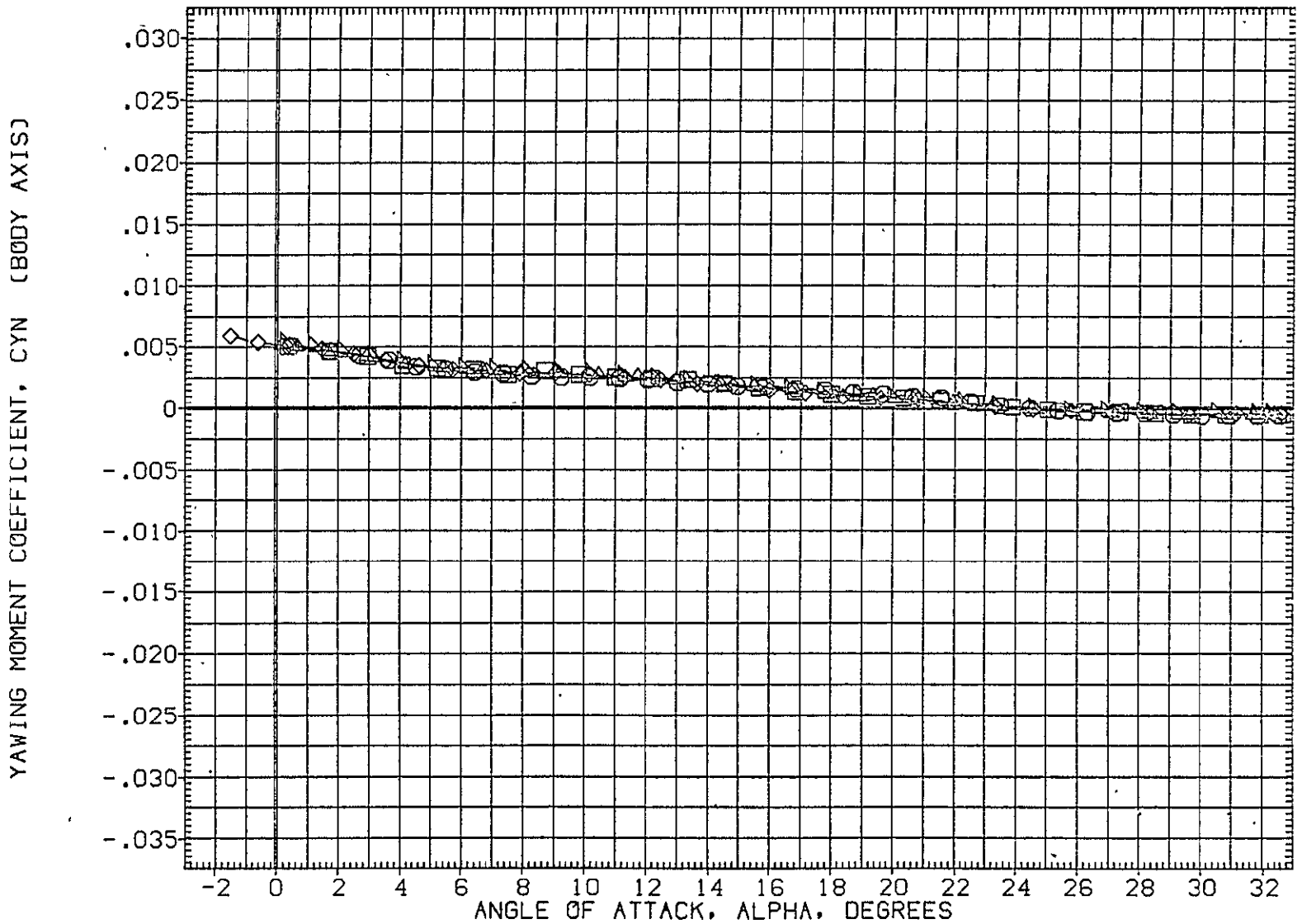


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY025)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	1.000
(RHY026)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	2.000	2.000
(RHY027)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY028)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

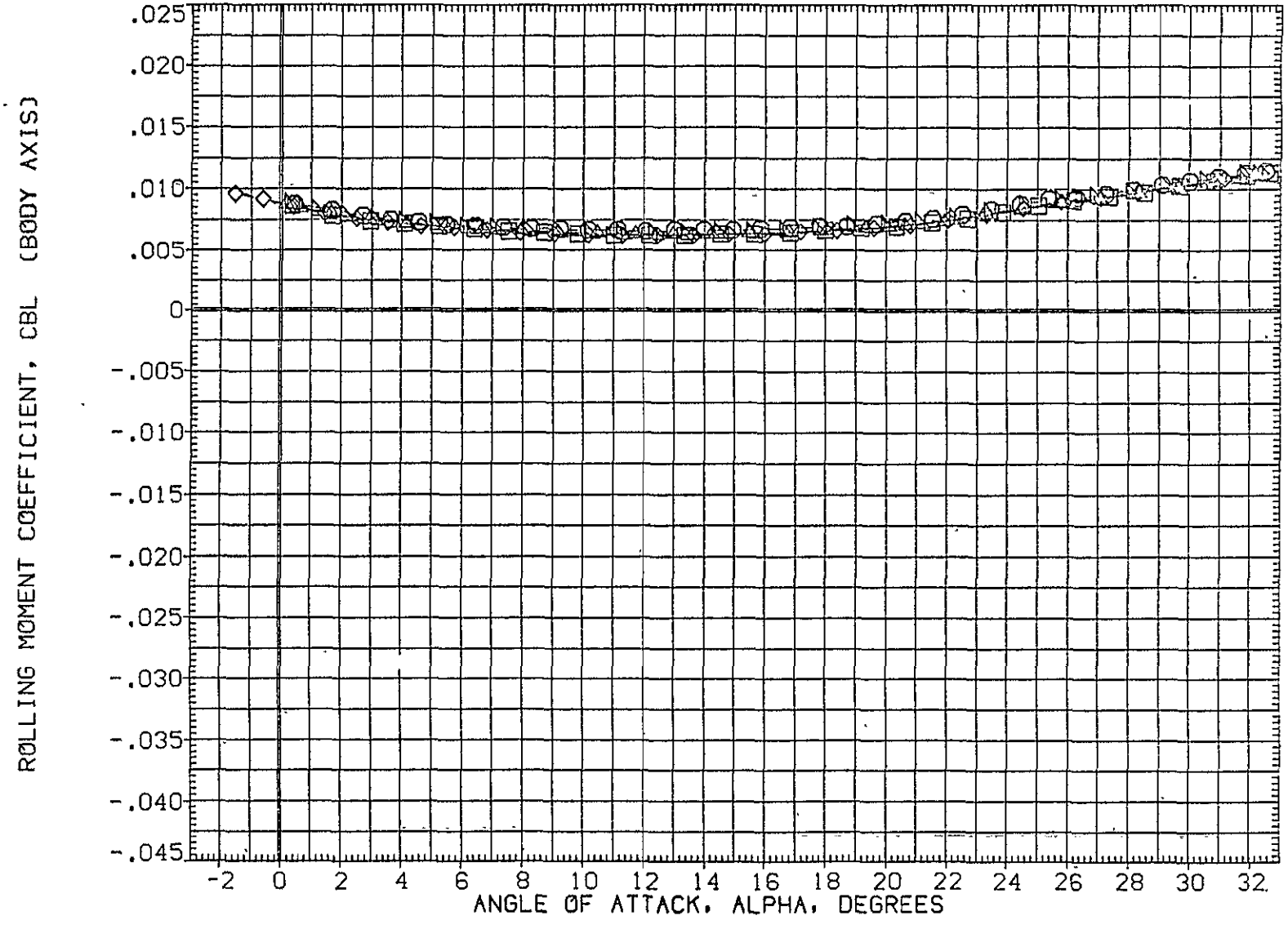


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	1.000	1.000
(RHY025)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	2.000	1.000
(RHY026)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	2.000	2.000
(RHY027)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	3.000	1.000
(RHY028)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	4.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

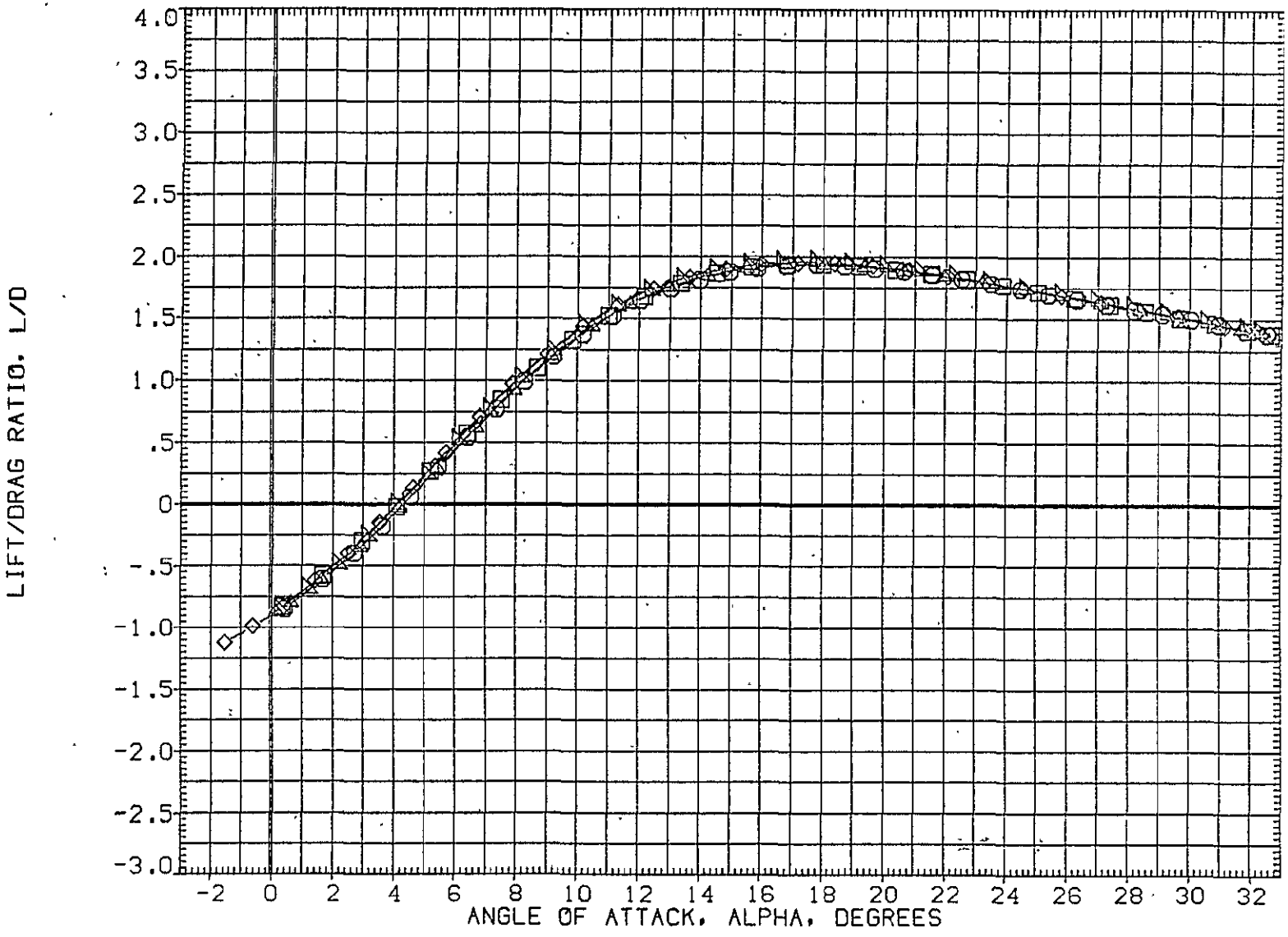


FIG 8 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

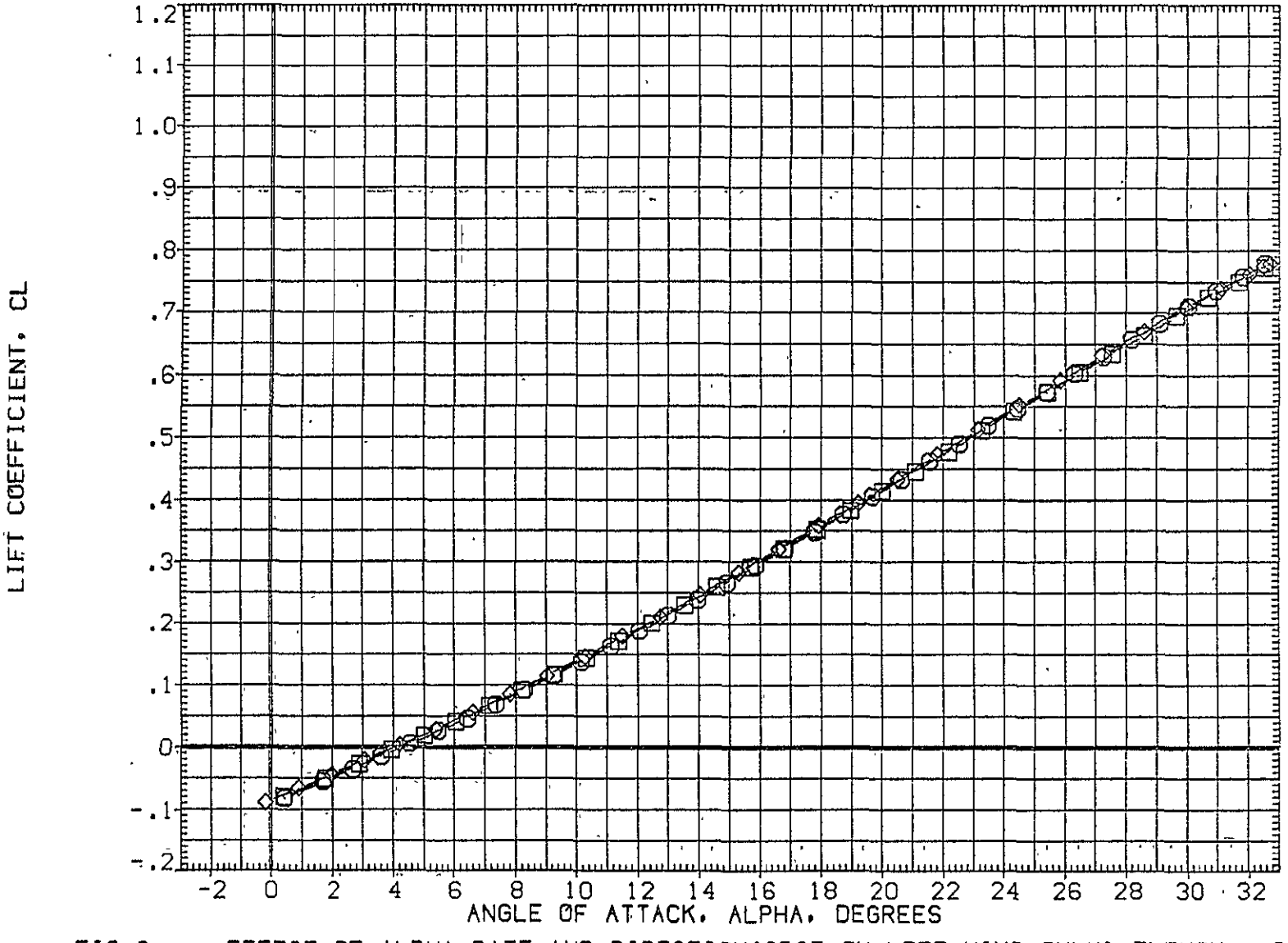


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	◇□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

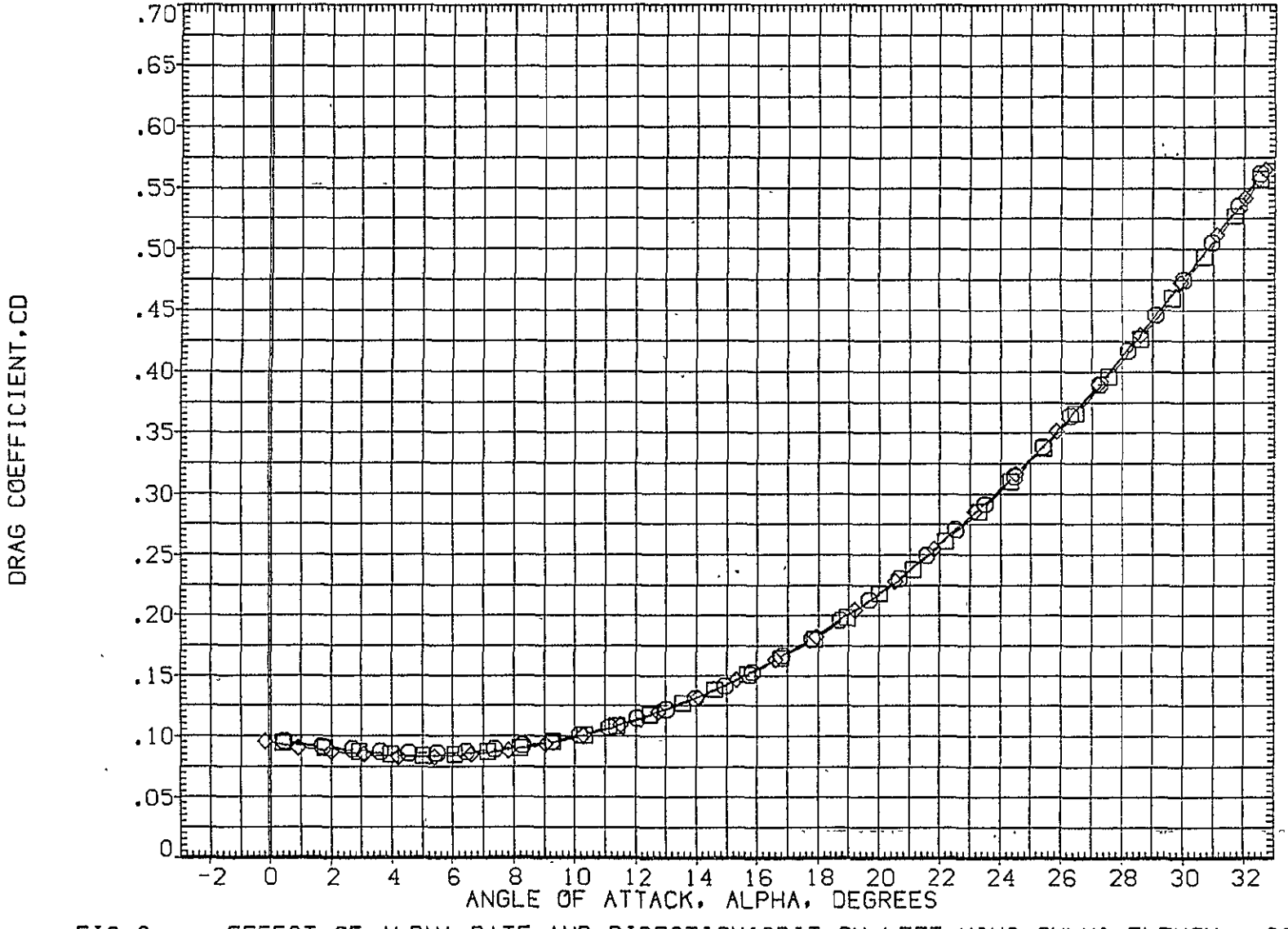


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

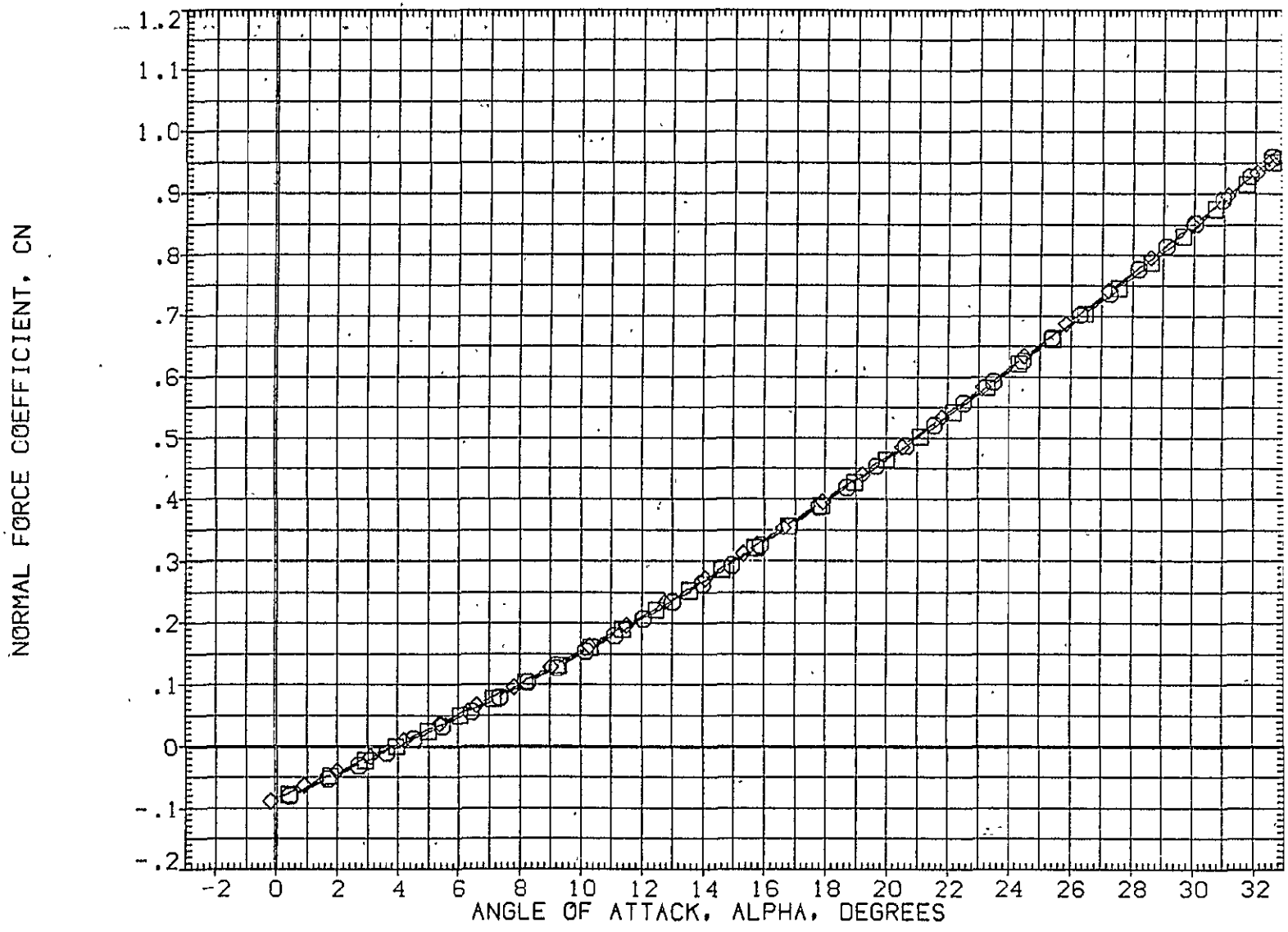


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

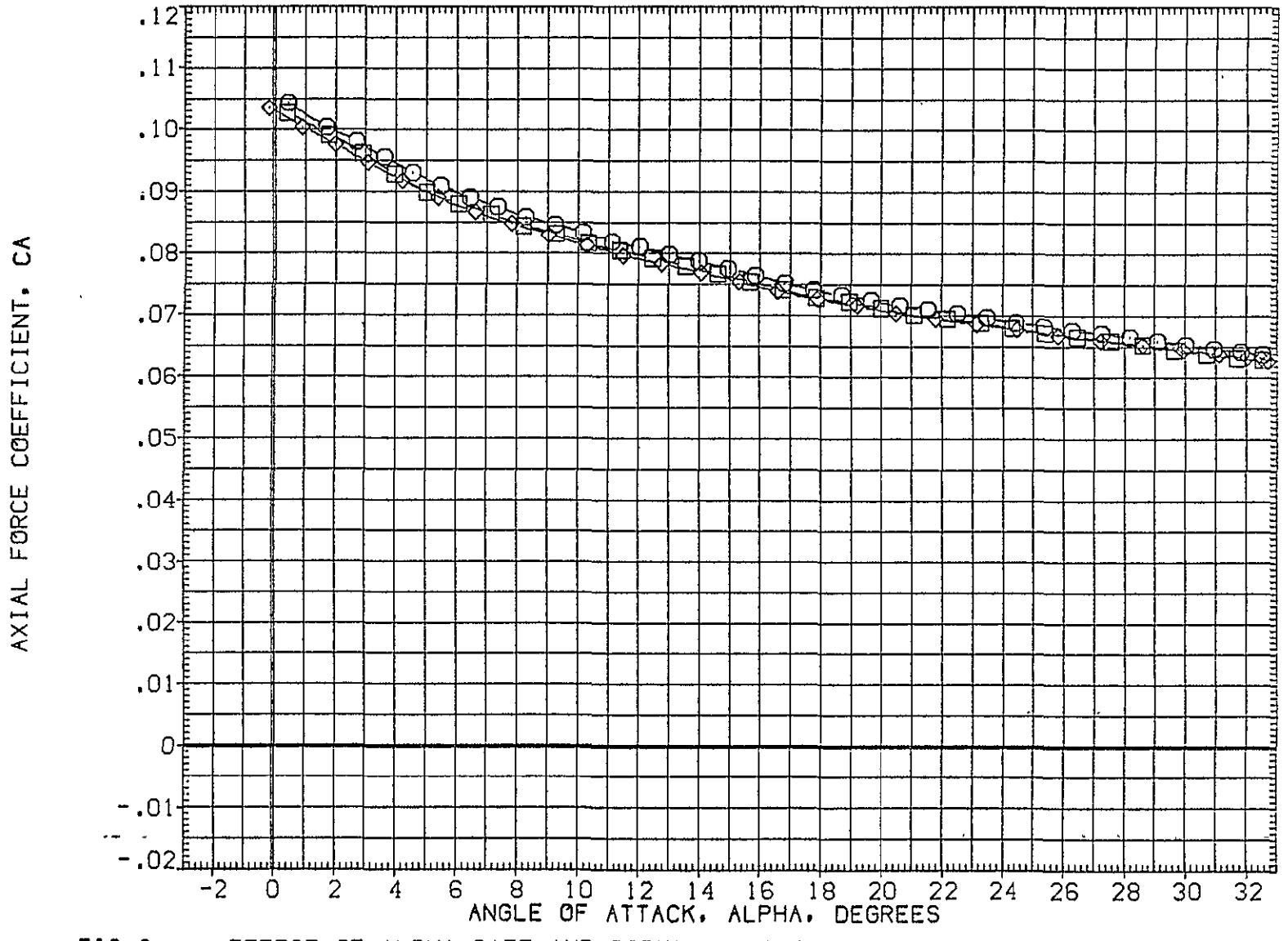


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	- 474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

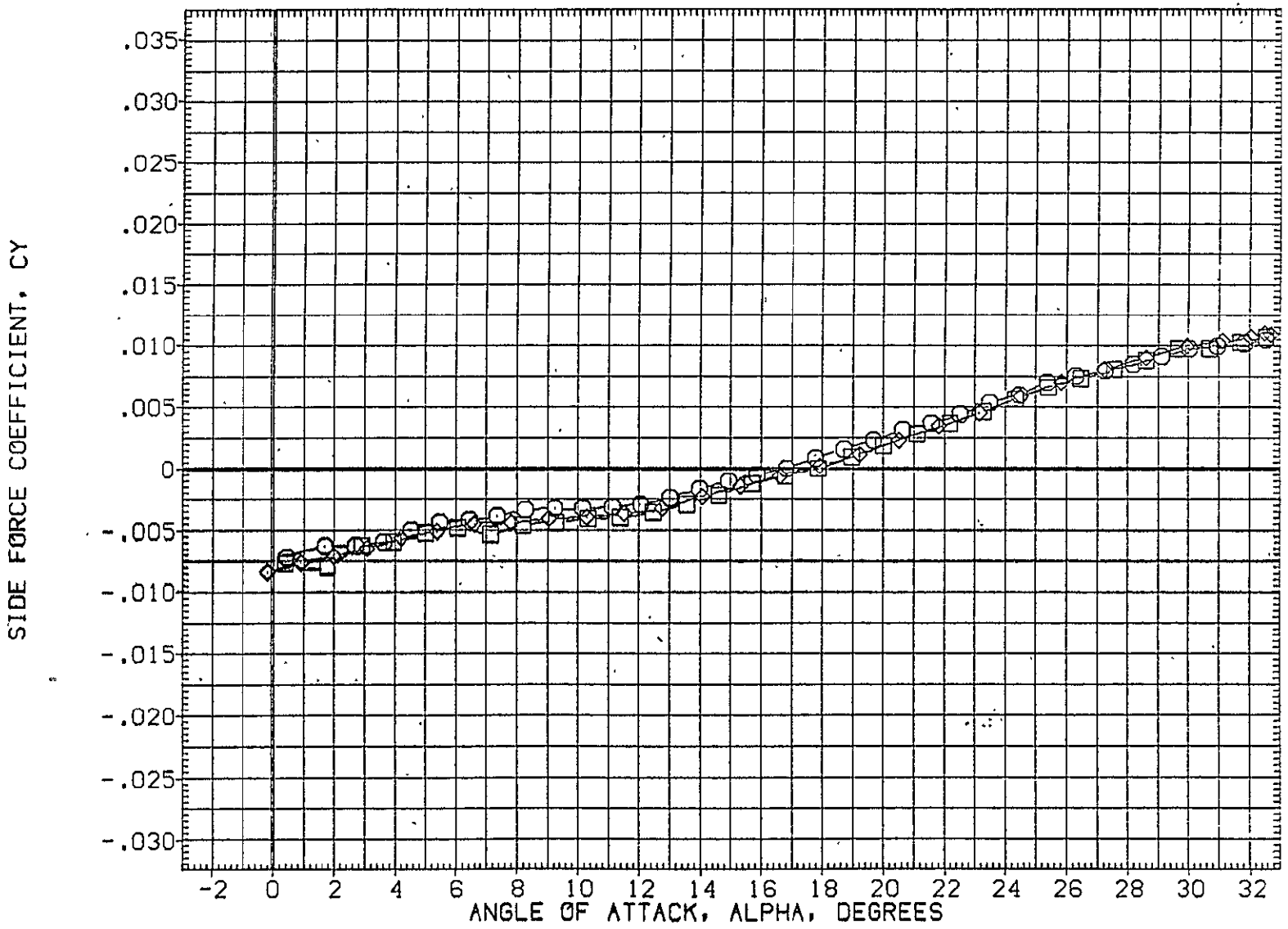


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

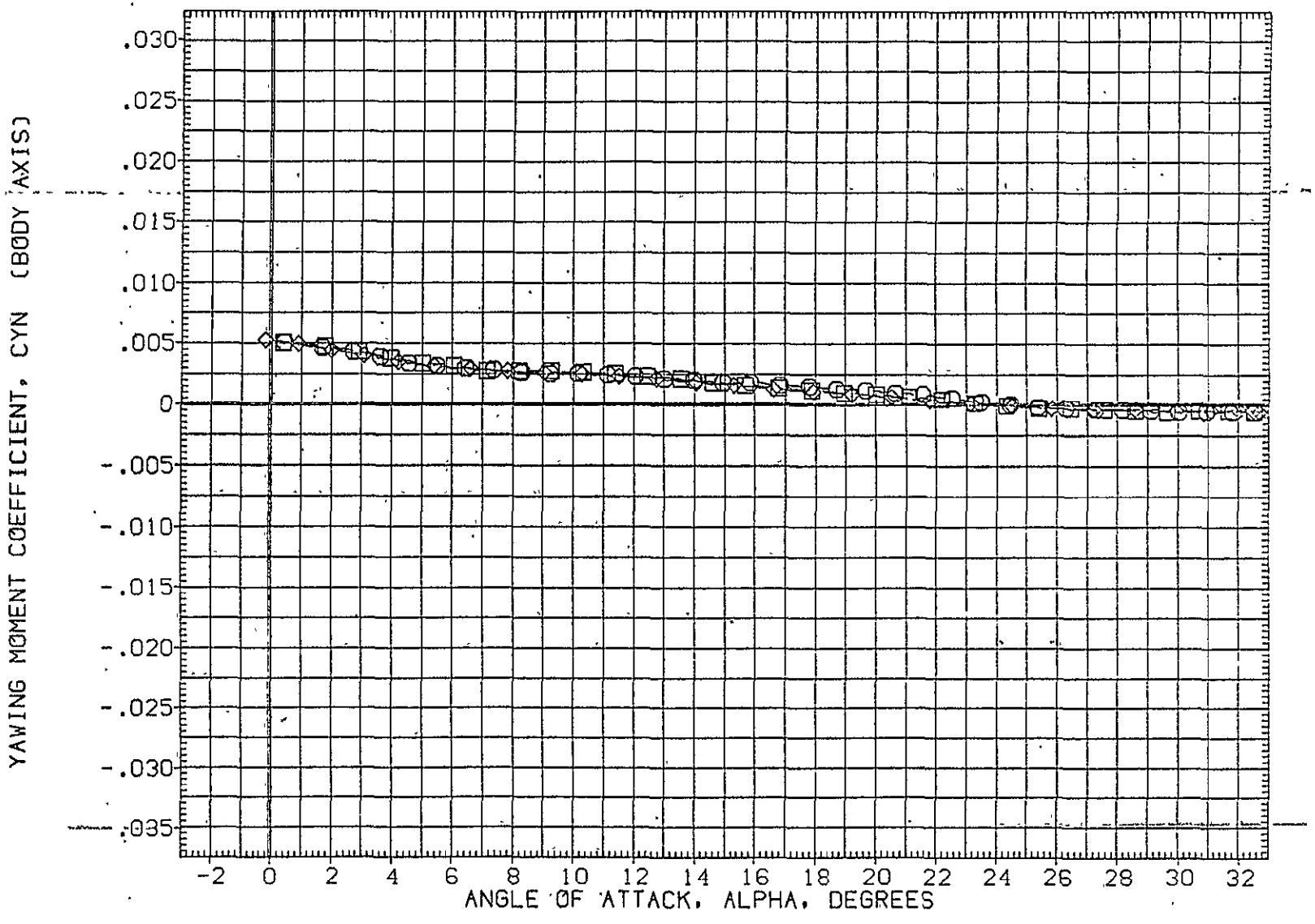


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

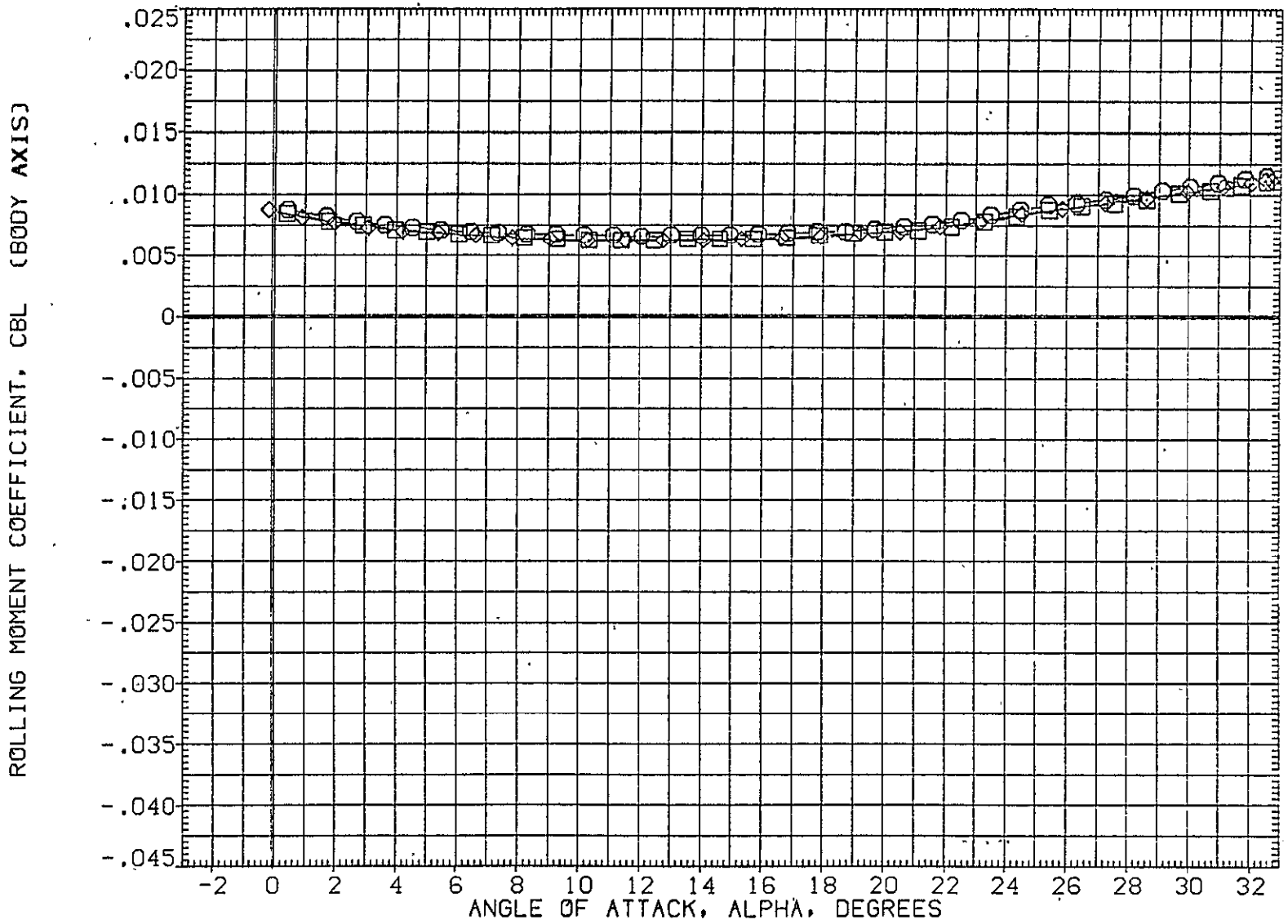


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY024)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	1.000	1.000
(RHY029)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY030)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

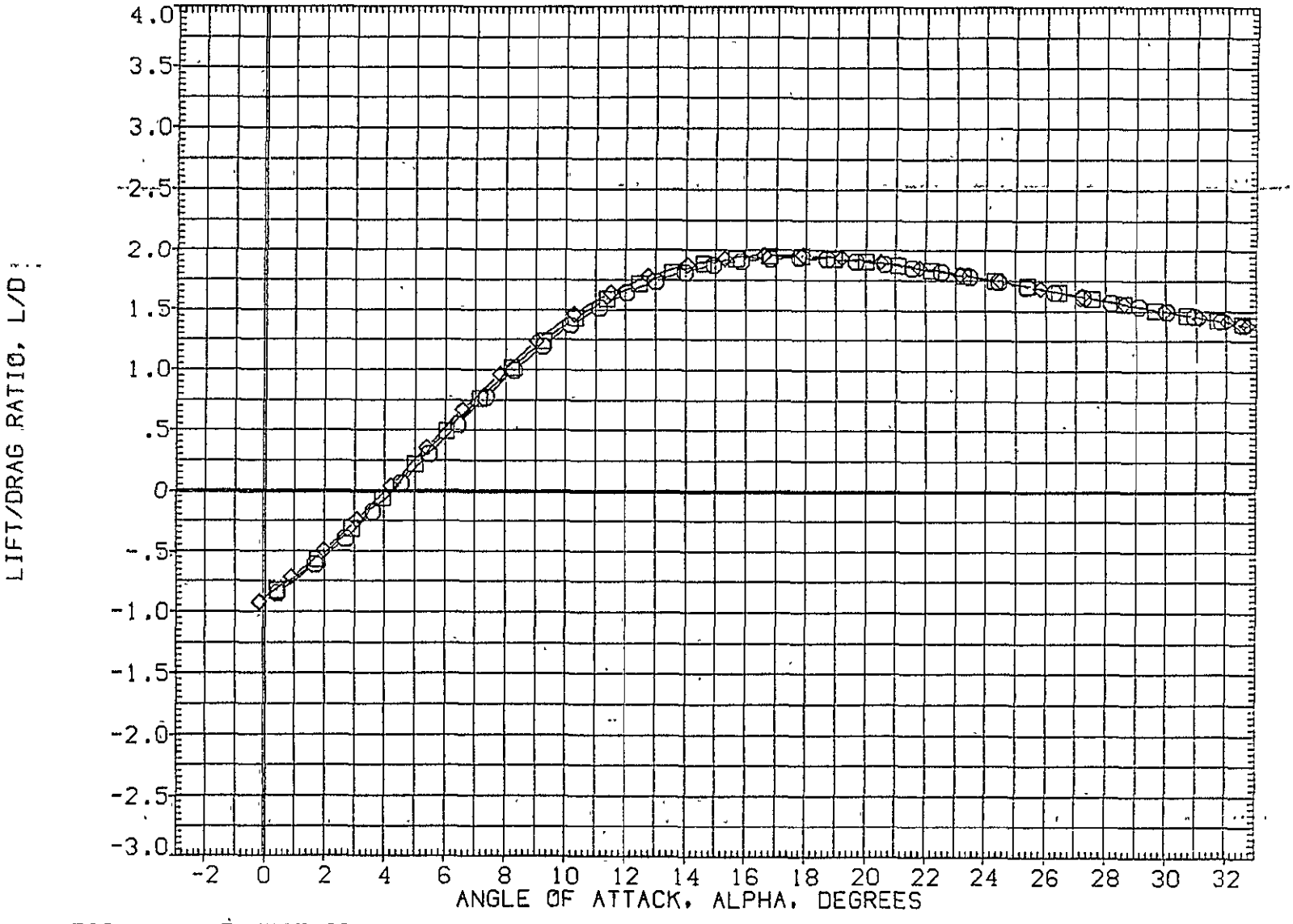


FIG 9 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ,F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

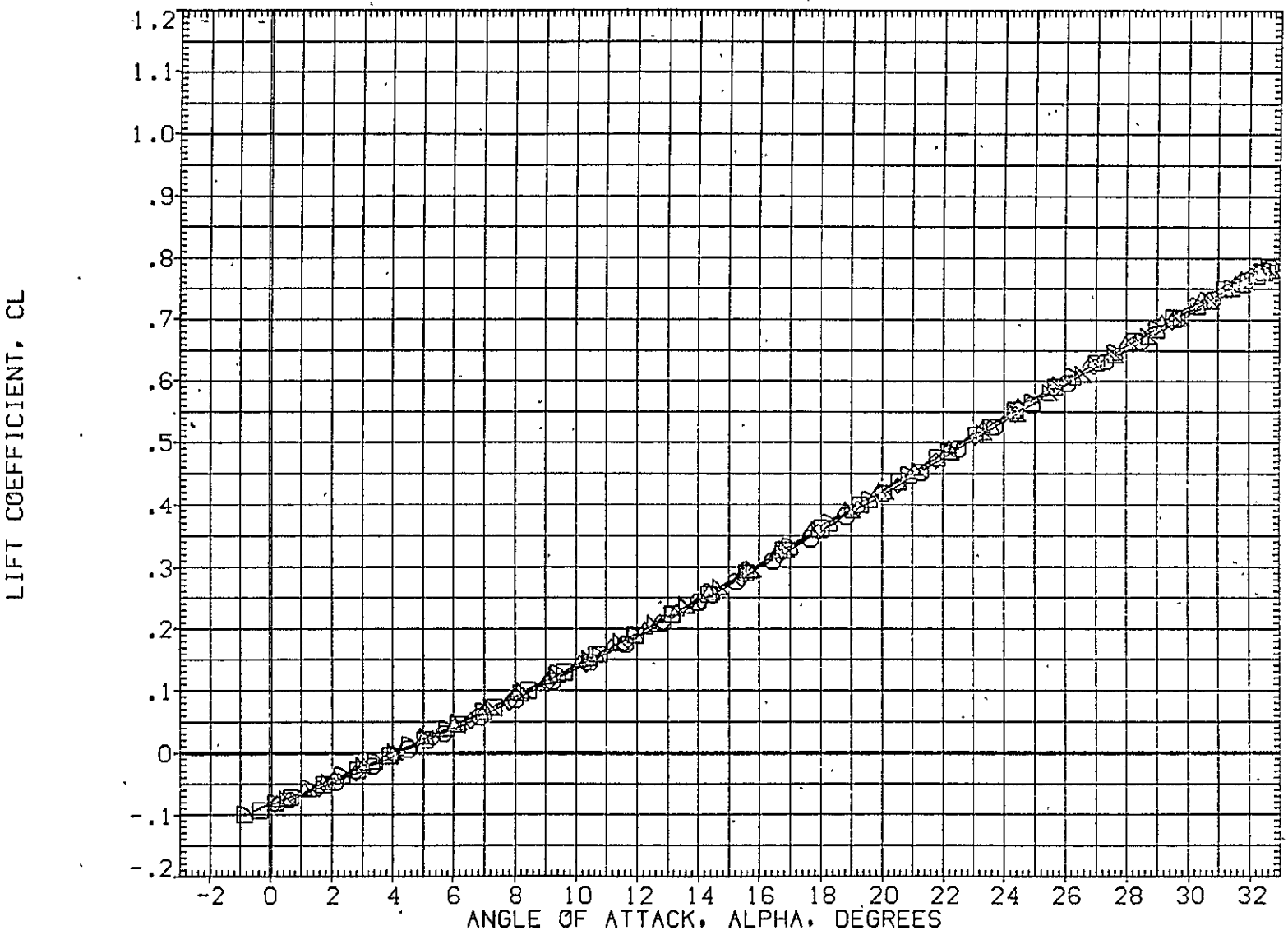


FIG 10 . EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

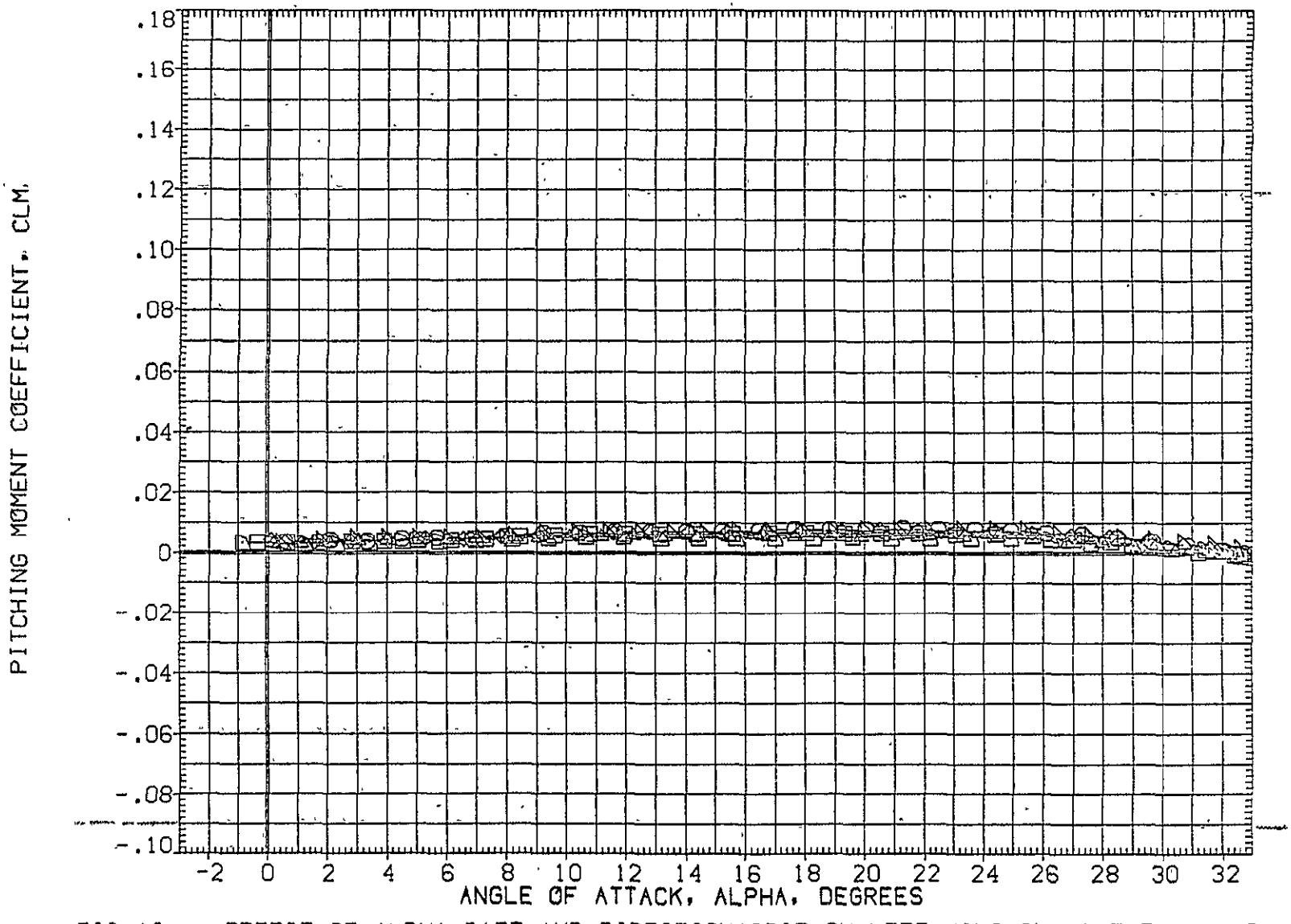


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	▷	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

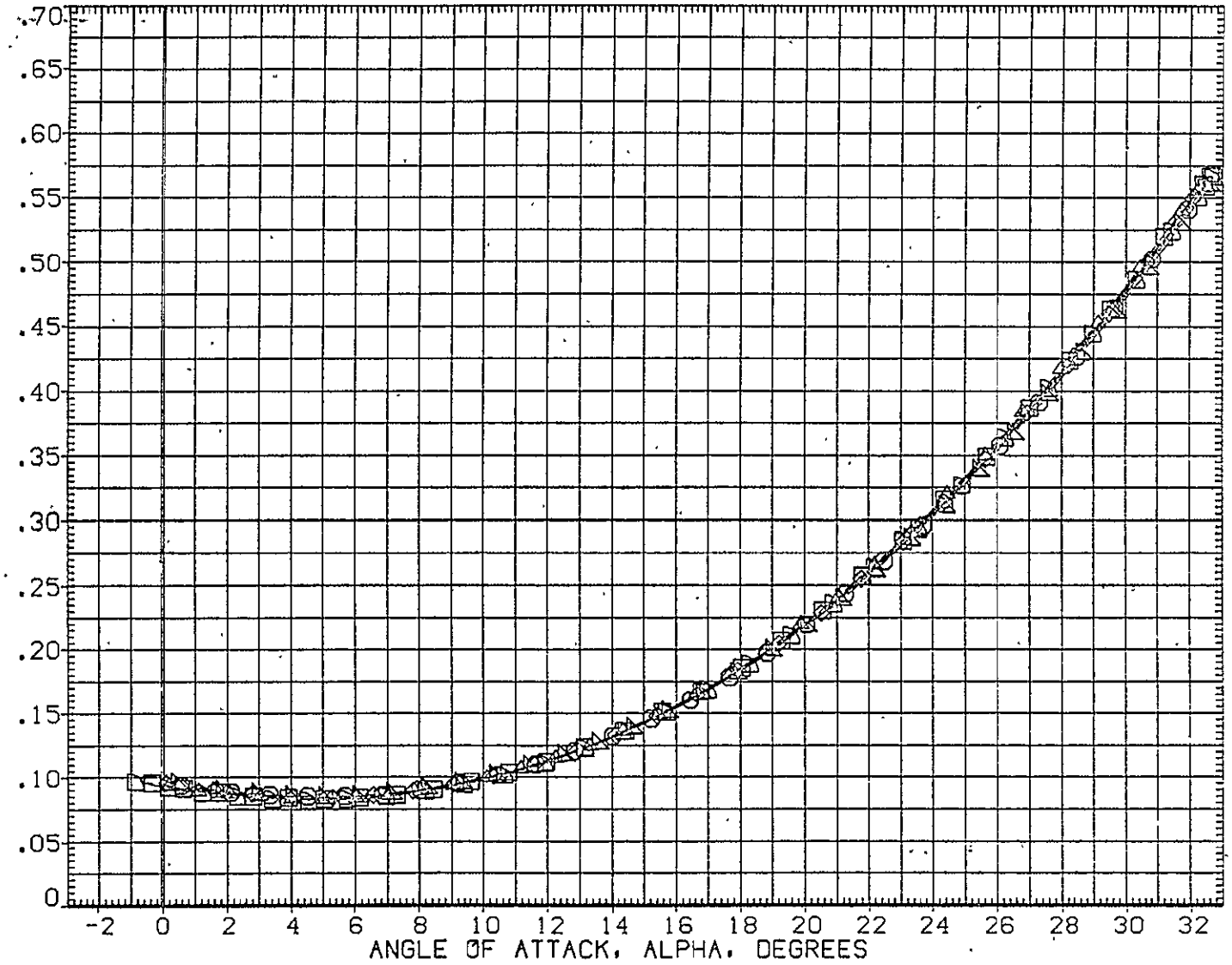


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

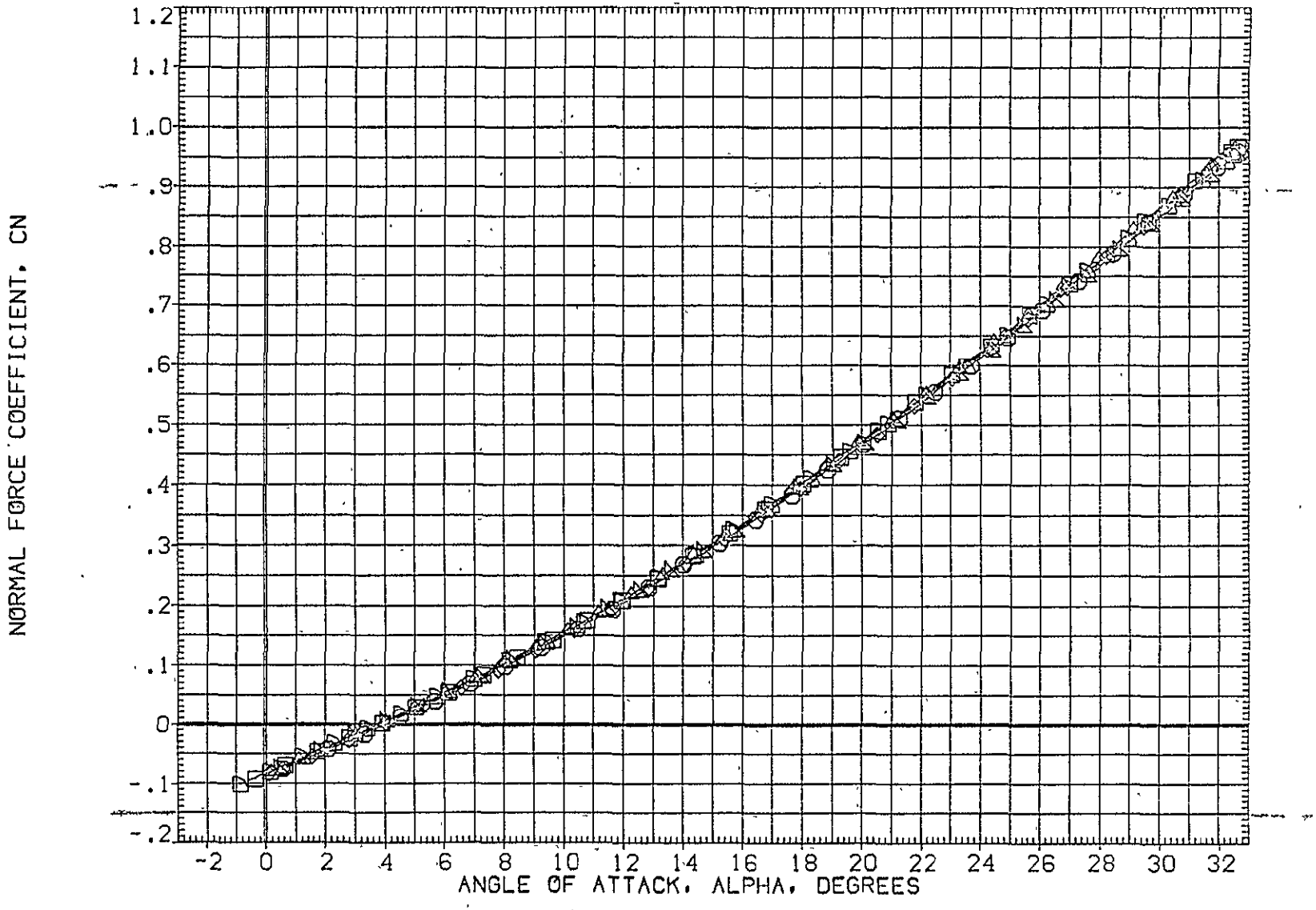


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	-2.000
(RHY043)	▷	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	⊲	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

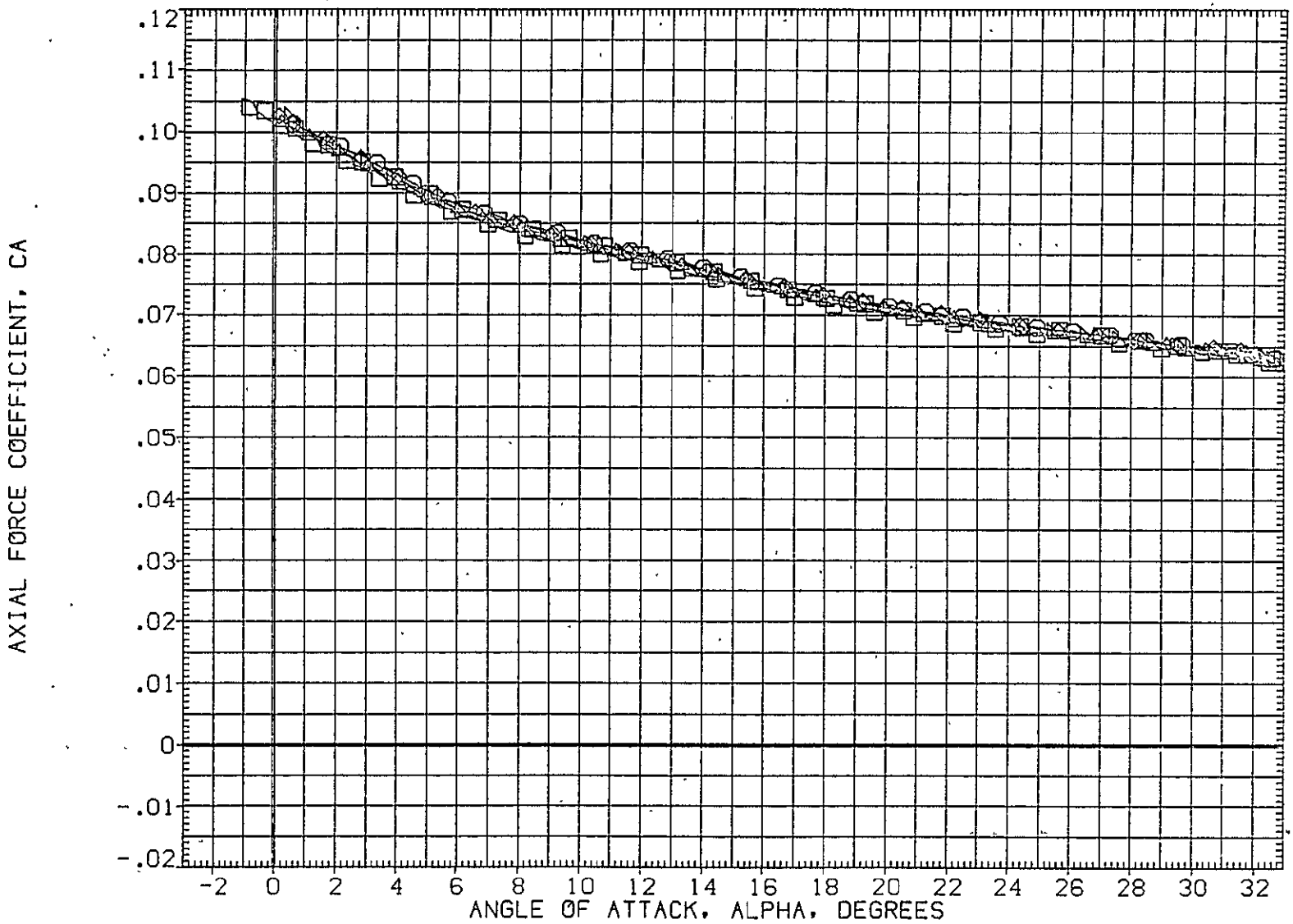


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	⊡	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

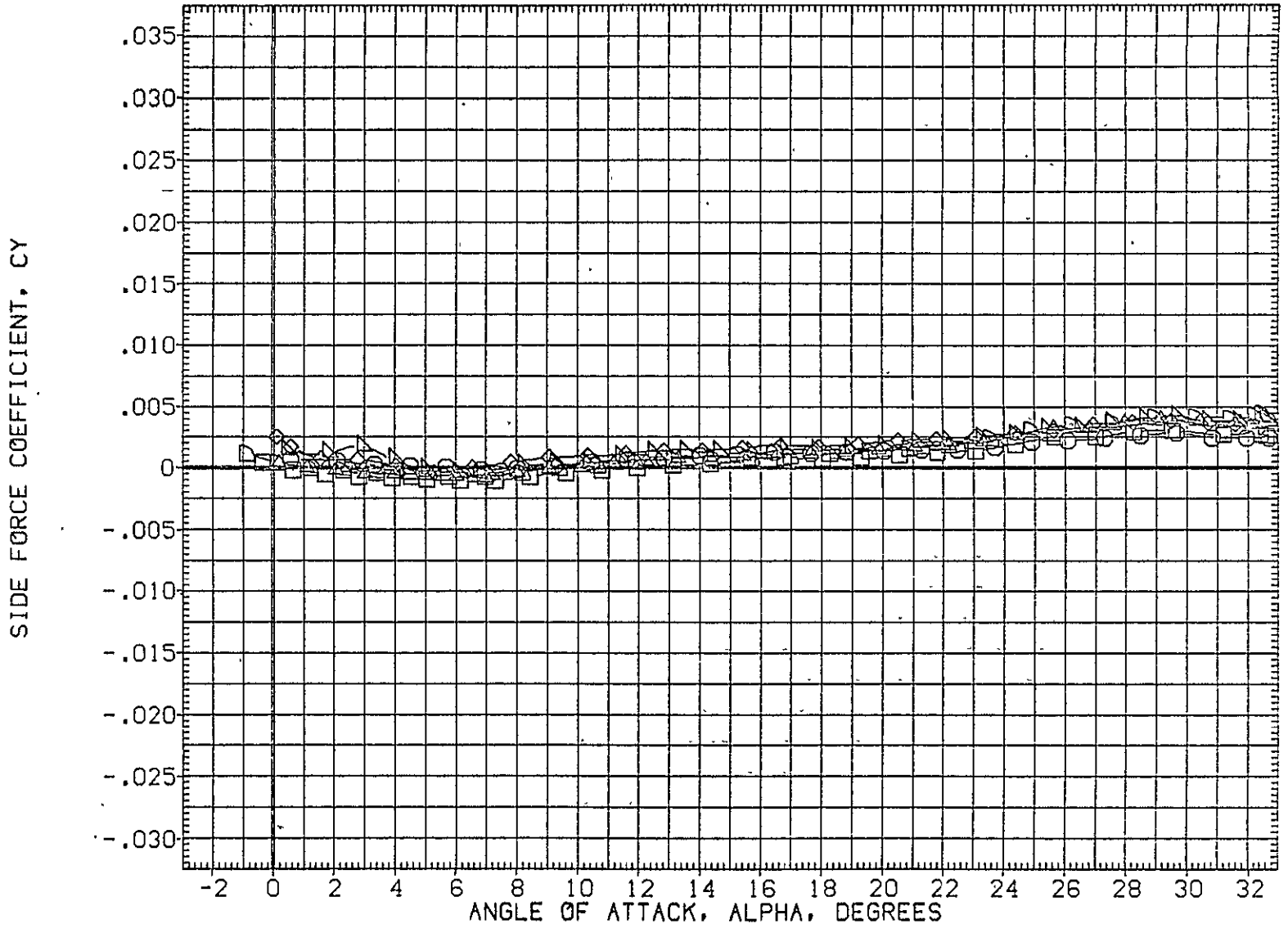


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

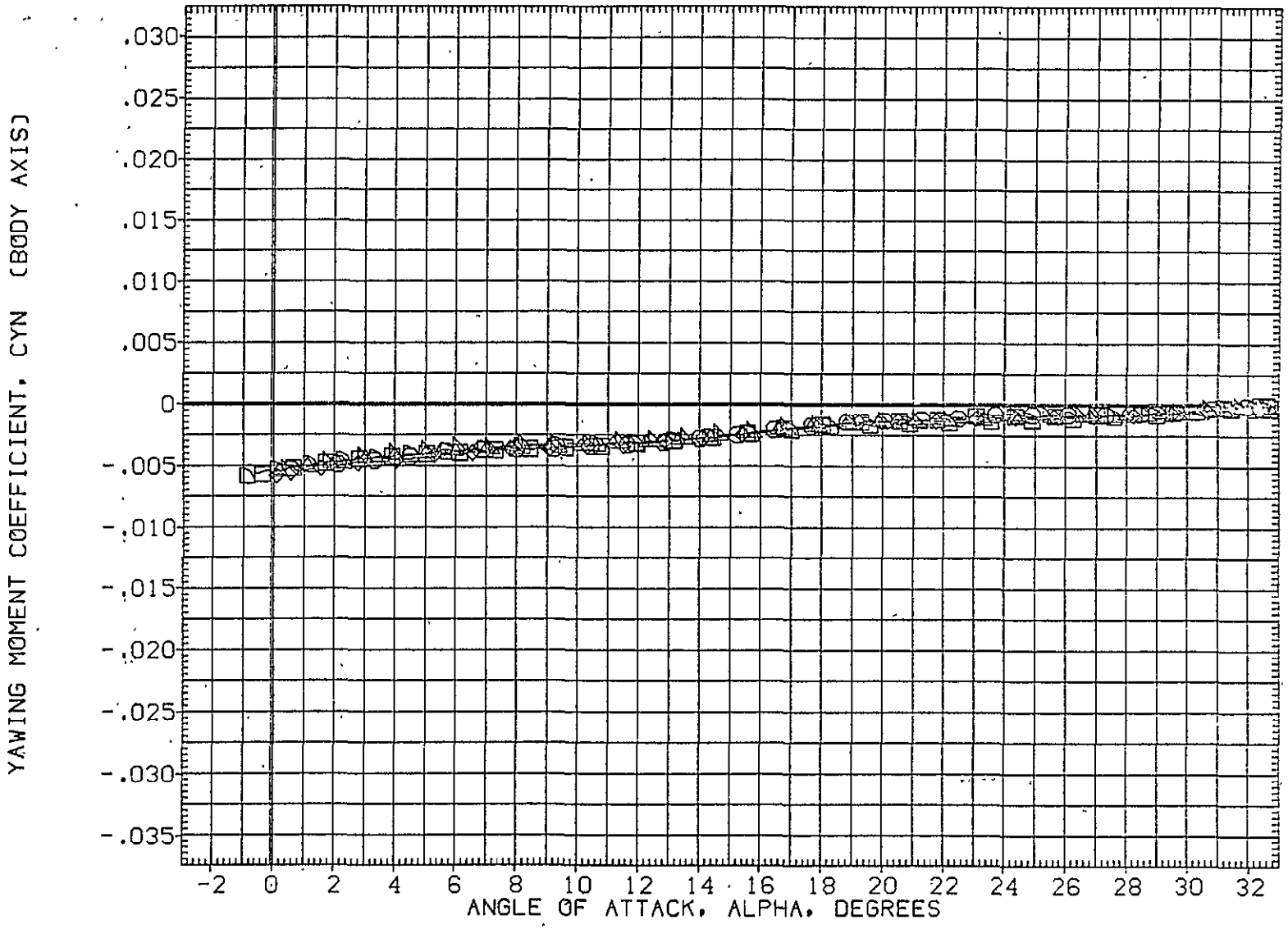


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	1.000
(RHY040)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	2.000	2.000
(RHY041)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY042)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY043)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY044)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

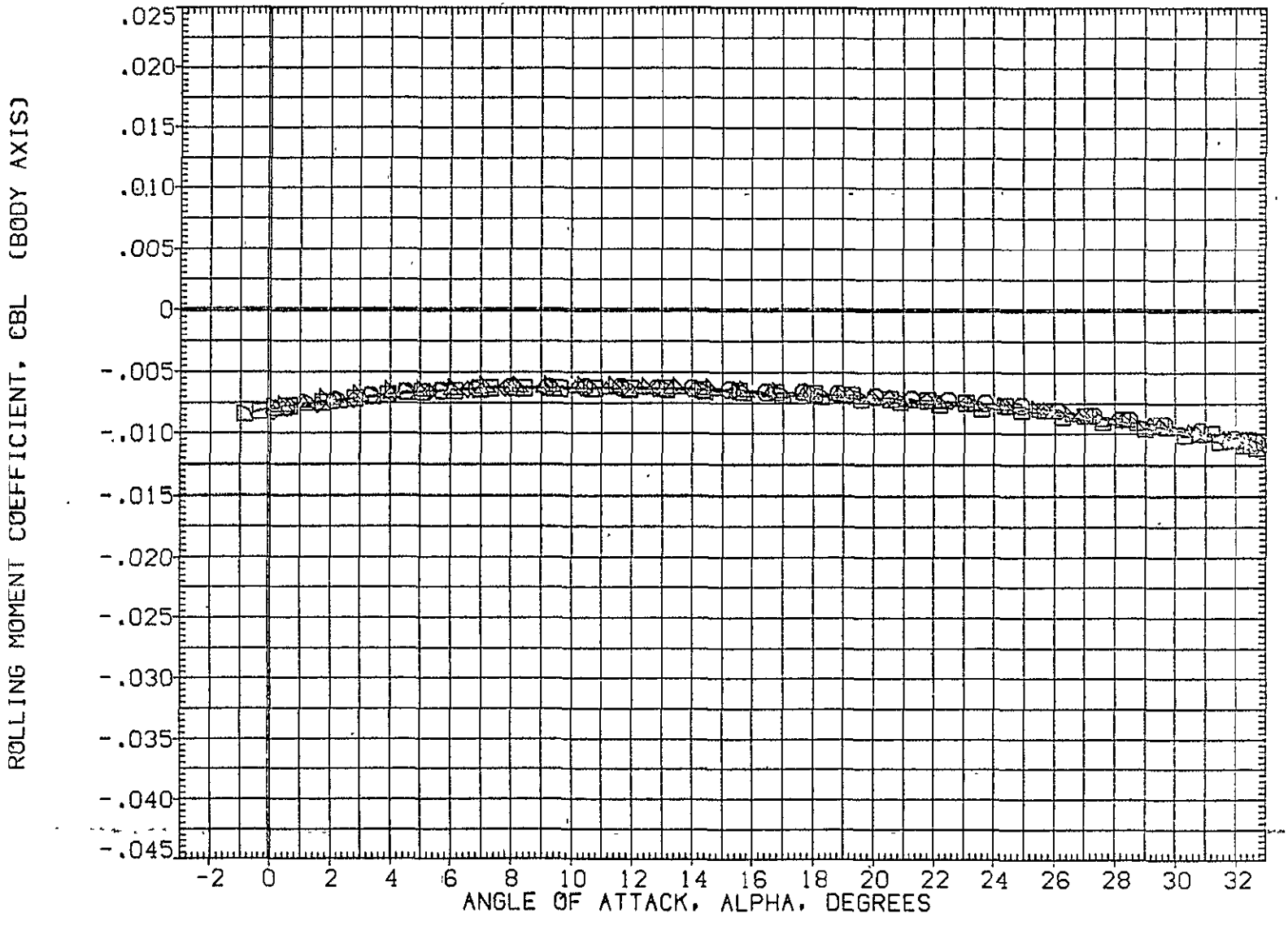


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY039)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	2.000	1.000
(RHY040)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	2.000	2.000
(RHY041)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	3.000	1.000
(RHY042)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	4.000	2.000
(RHY043)	▷	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	6.000	1.000
(RHY044)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

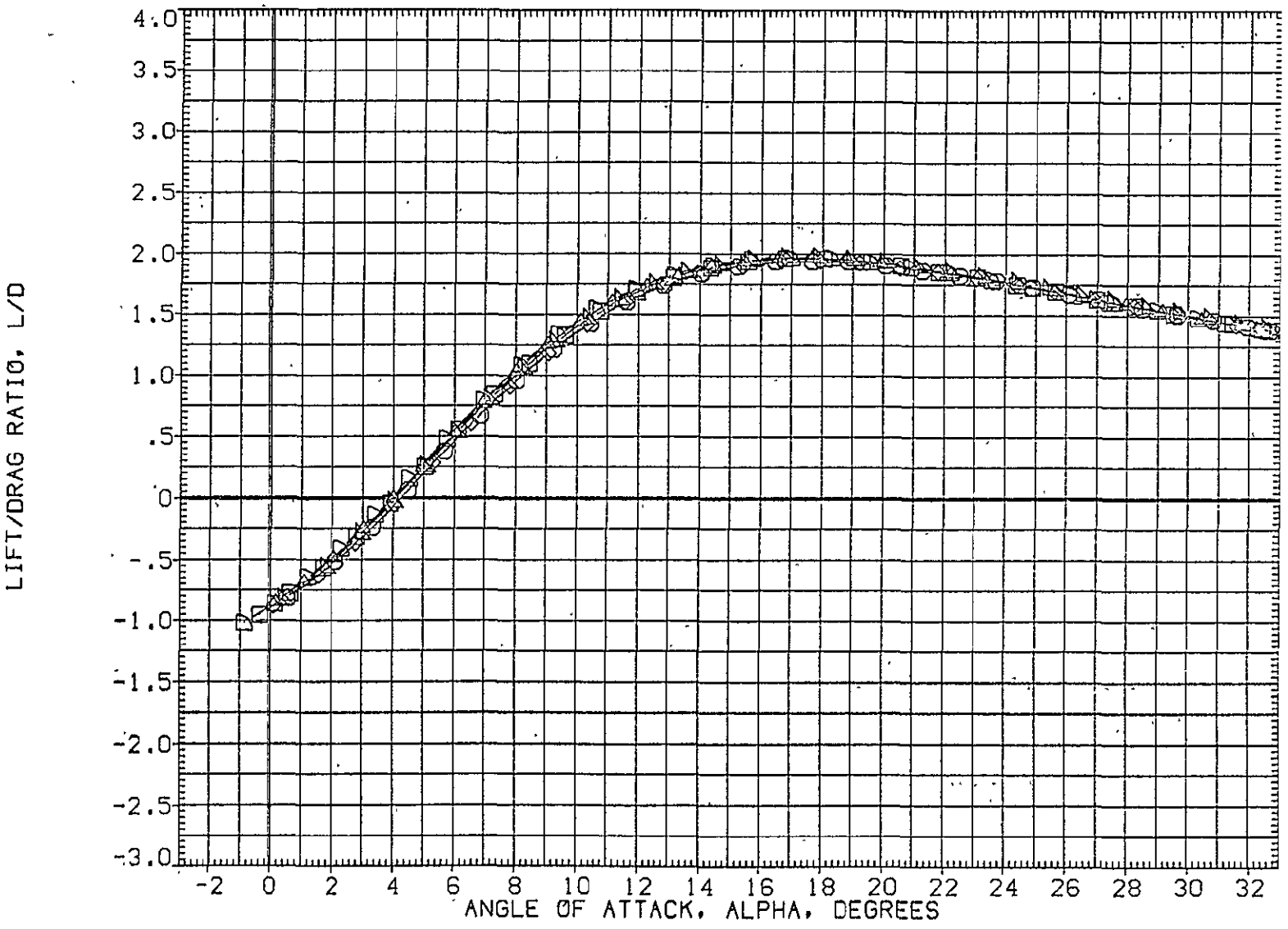


FIG 10 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON LEFT WING ONLY) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

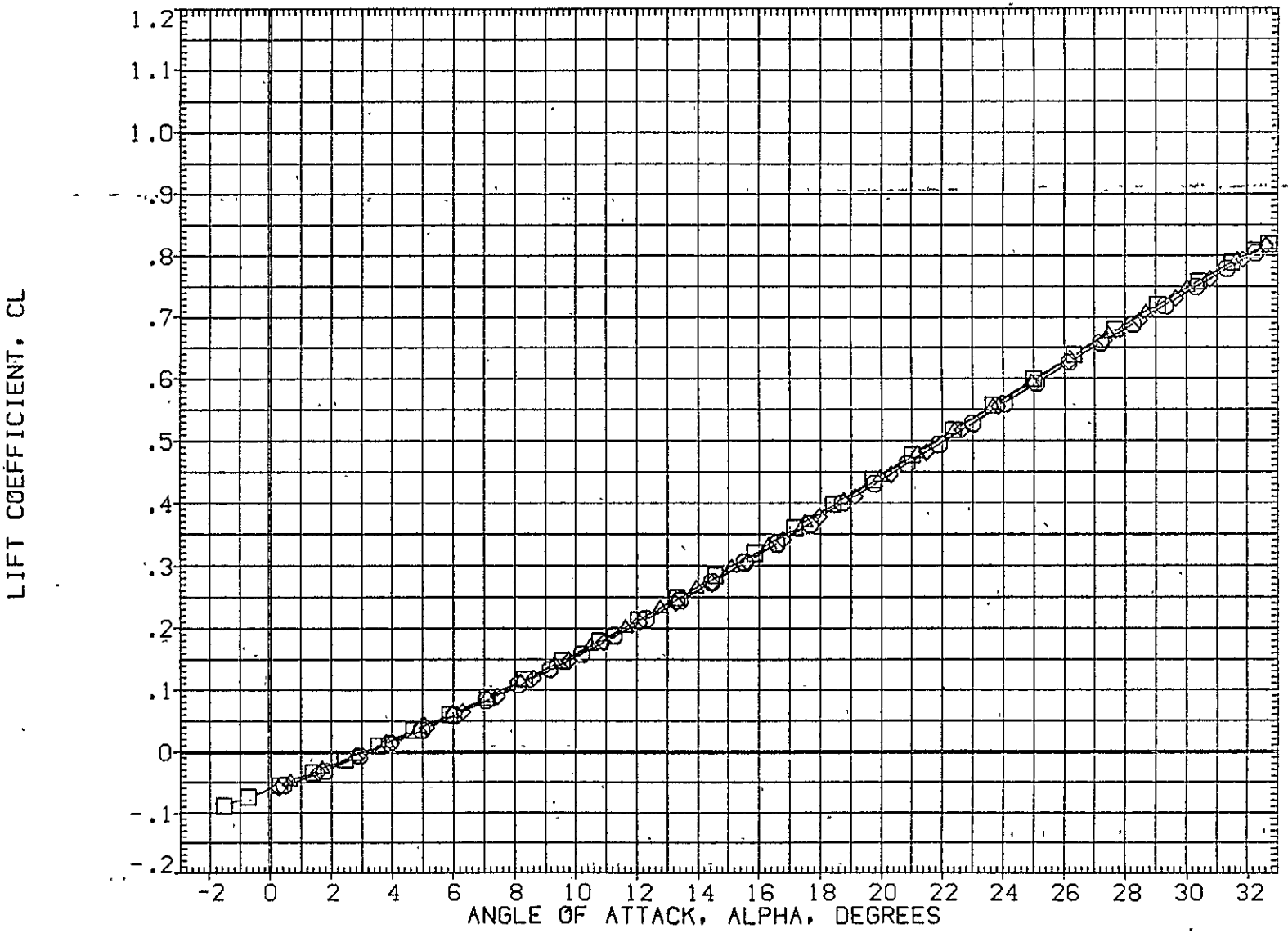


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

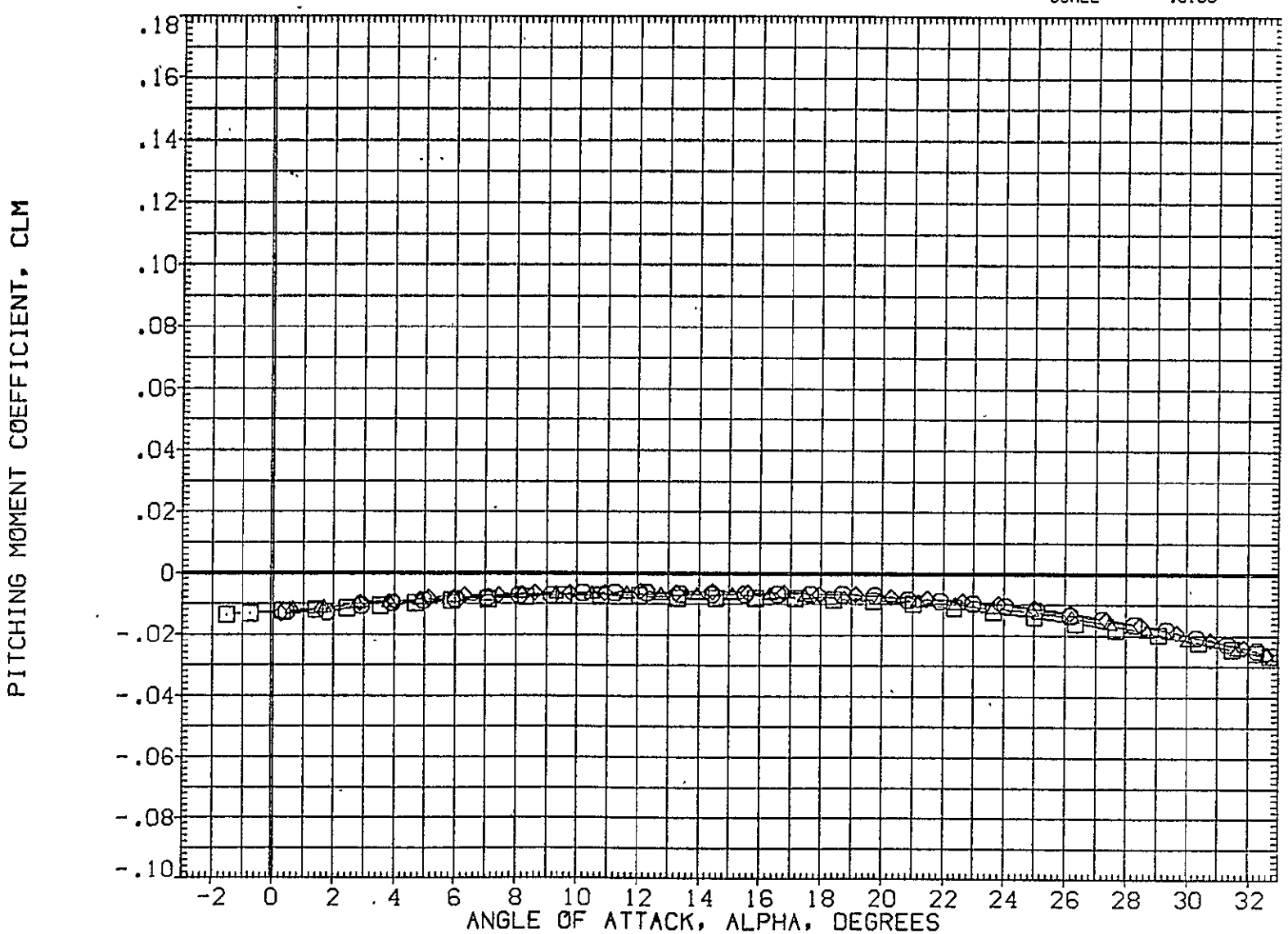


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	6.000	1.000
(RHY069)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	5.000	2.000
(RHY002)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	2.000	1.000
(RHY003)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

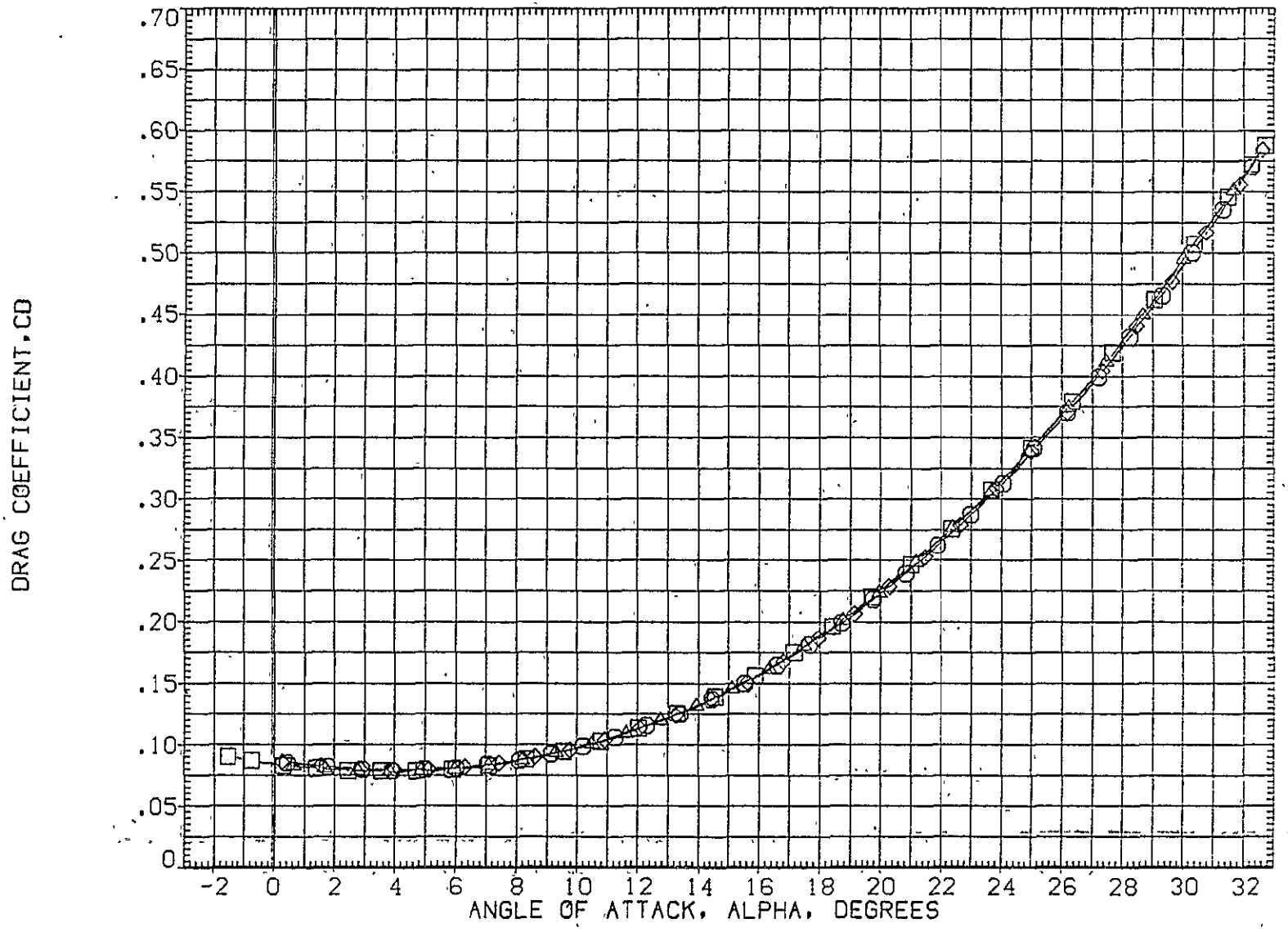


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

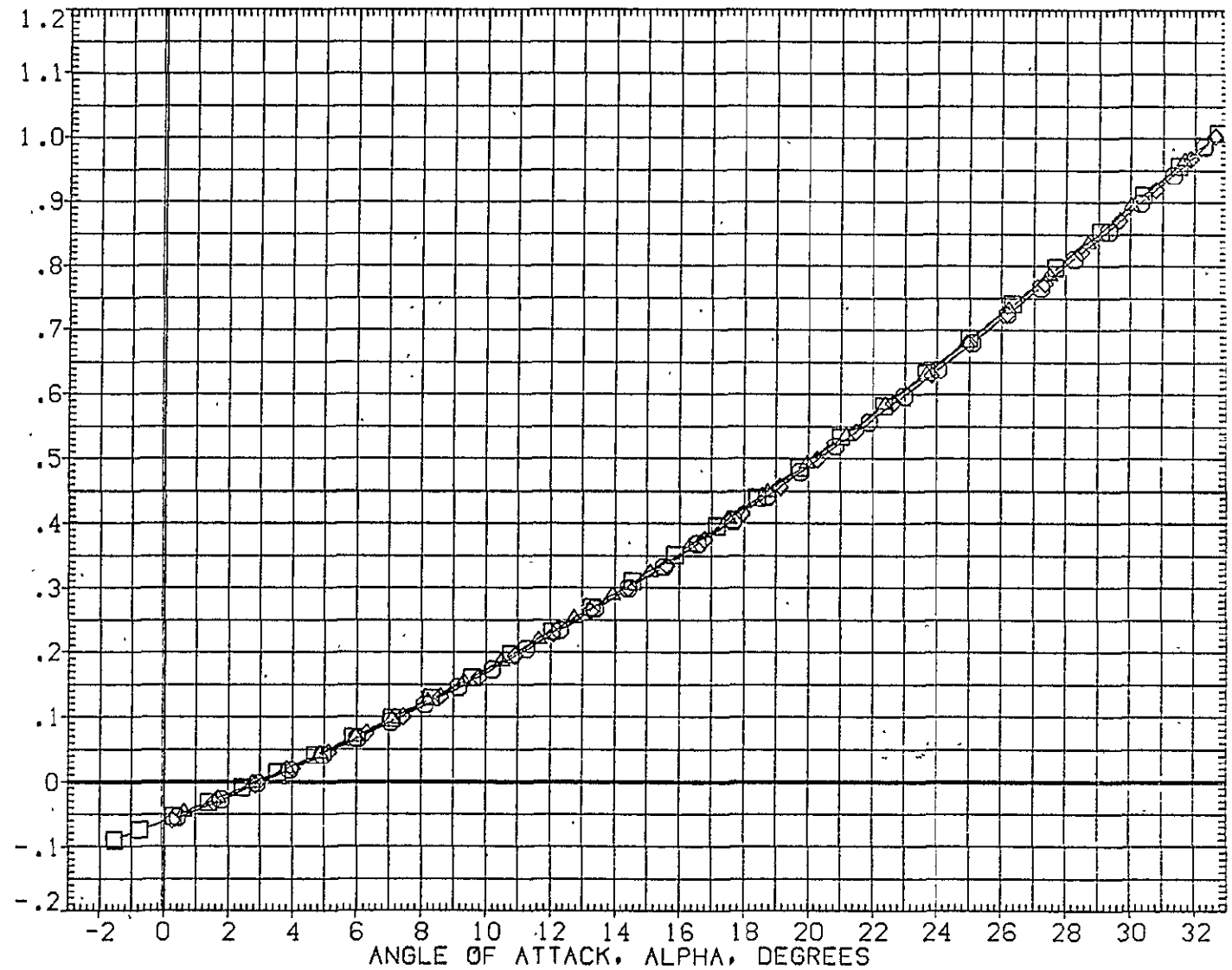


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.5

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

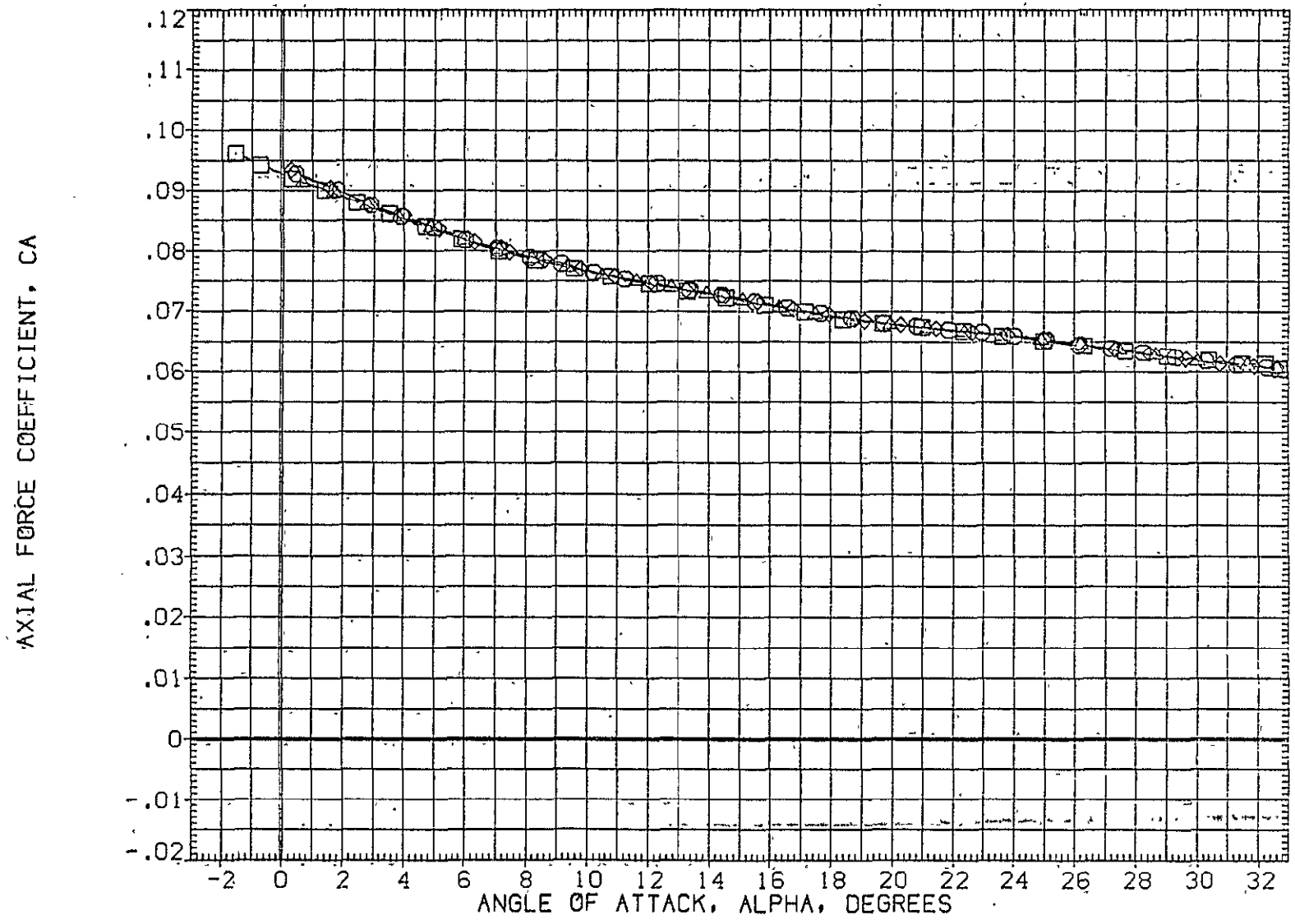


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON=.0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

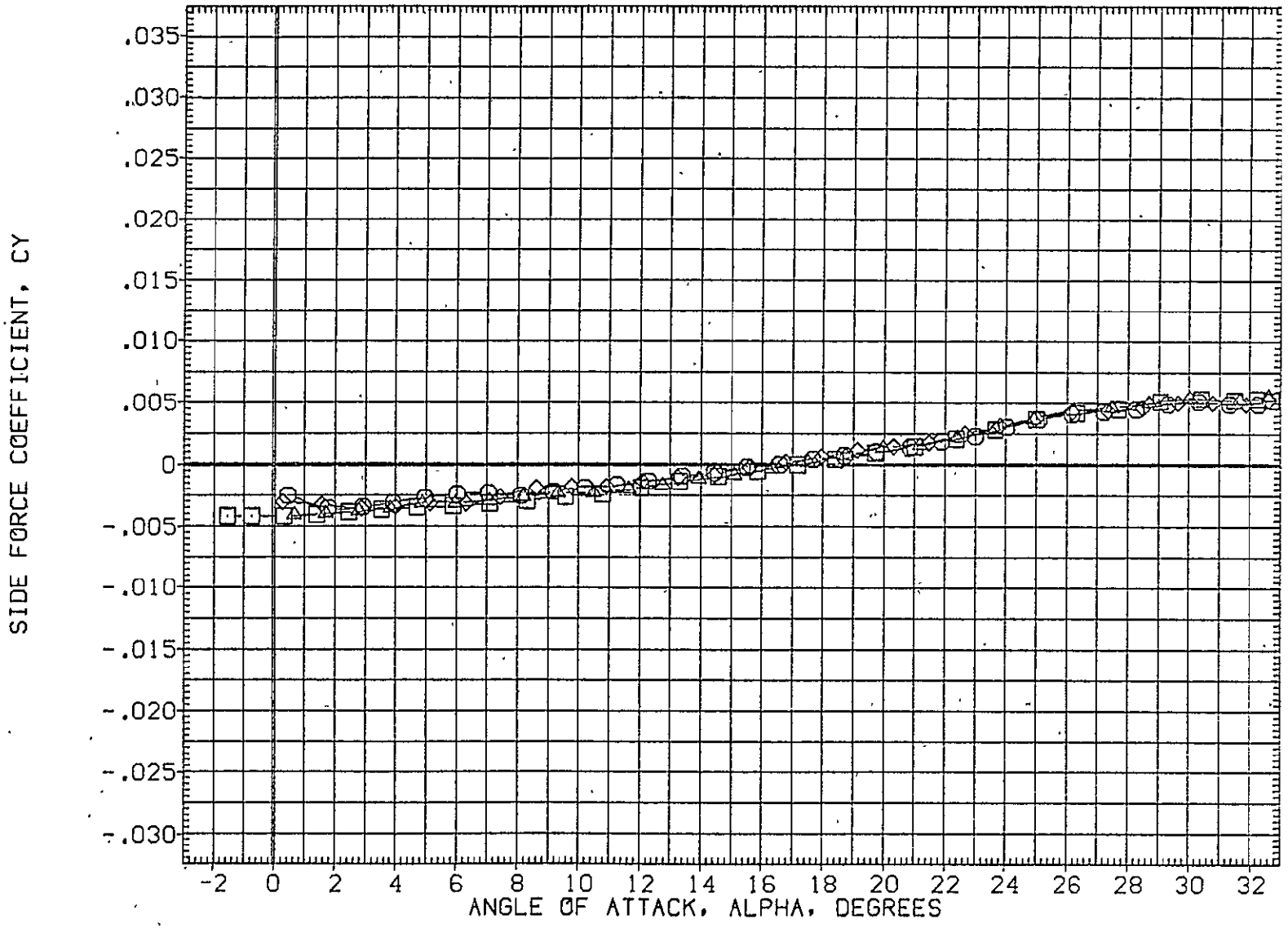


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

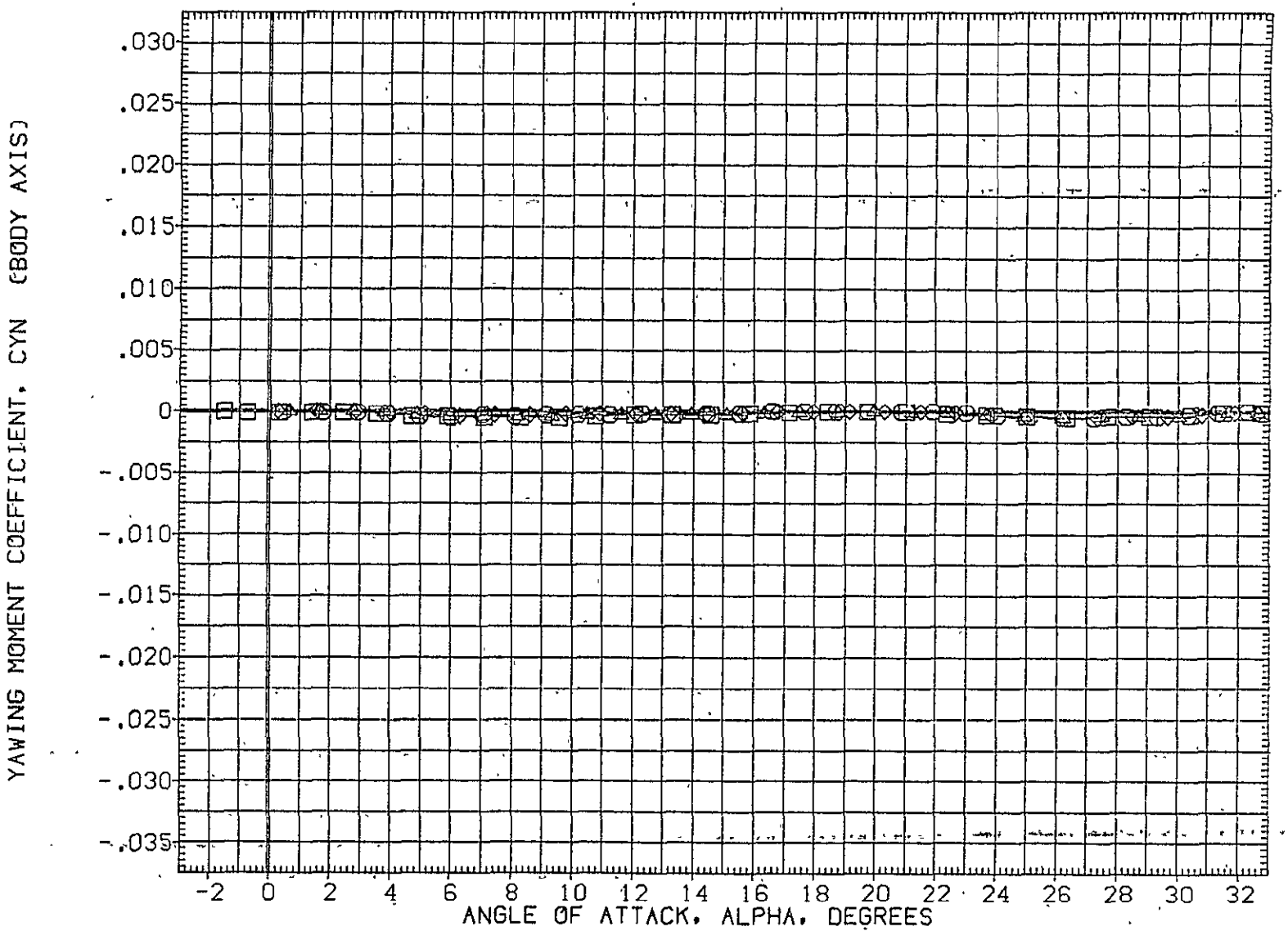


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

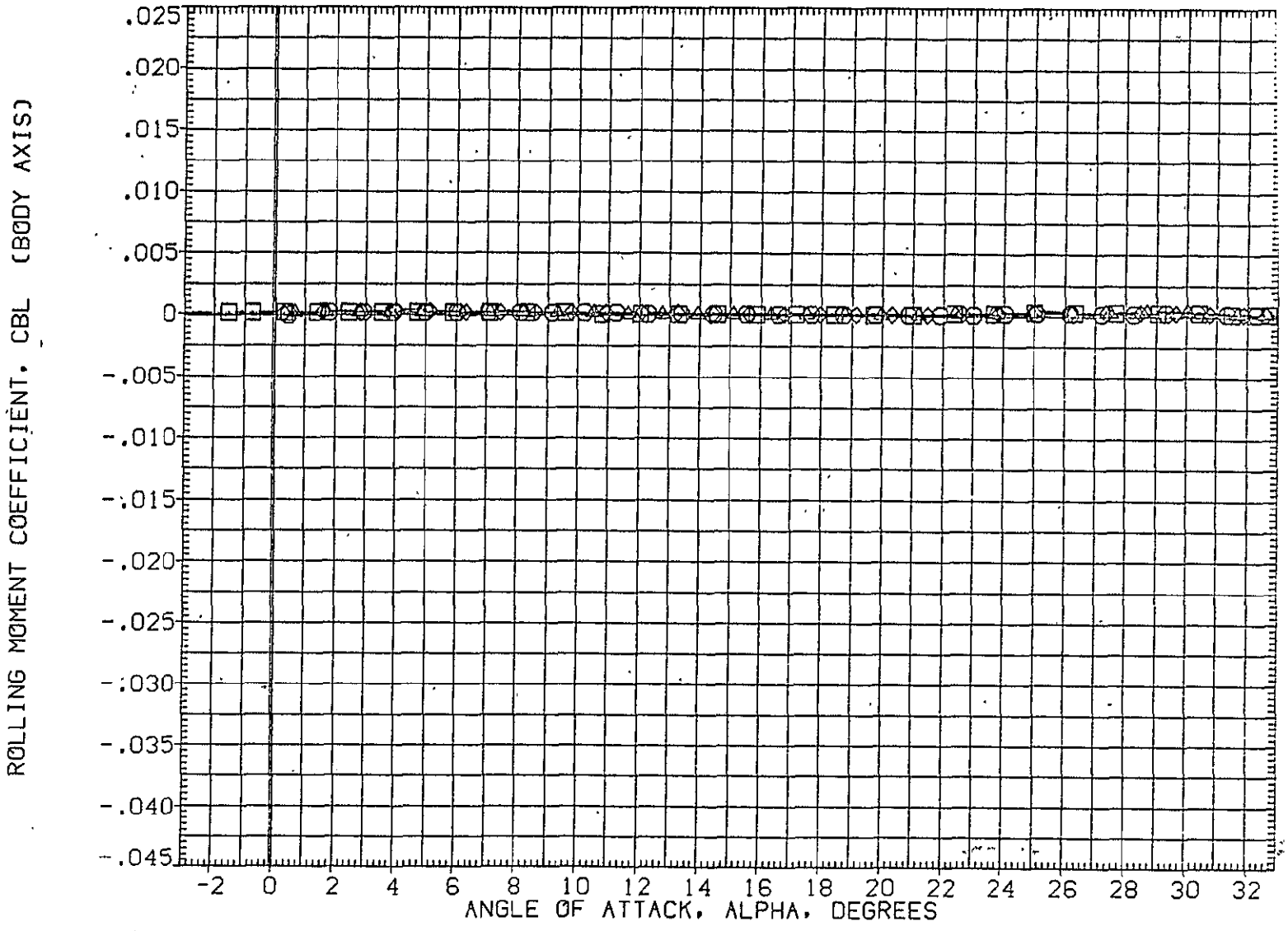


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY001)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY069)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY002)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	1.000
(RHY003)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	2.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

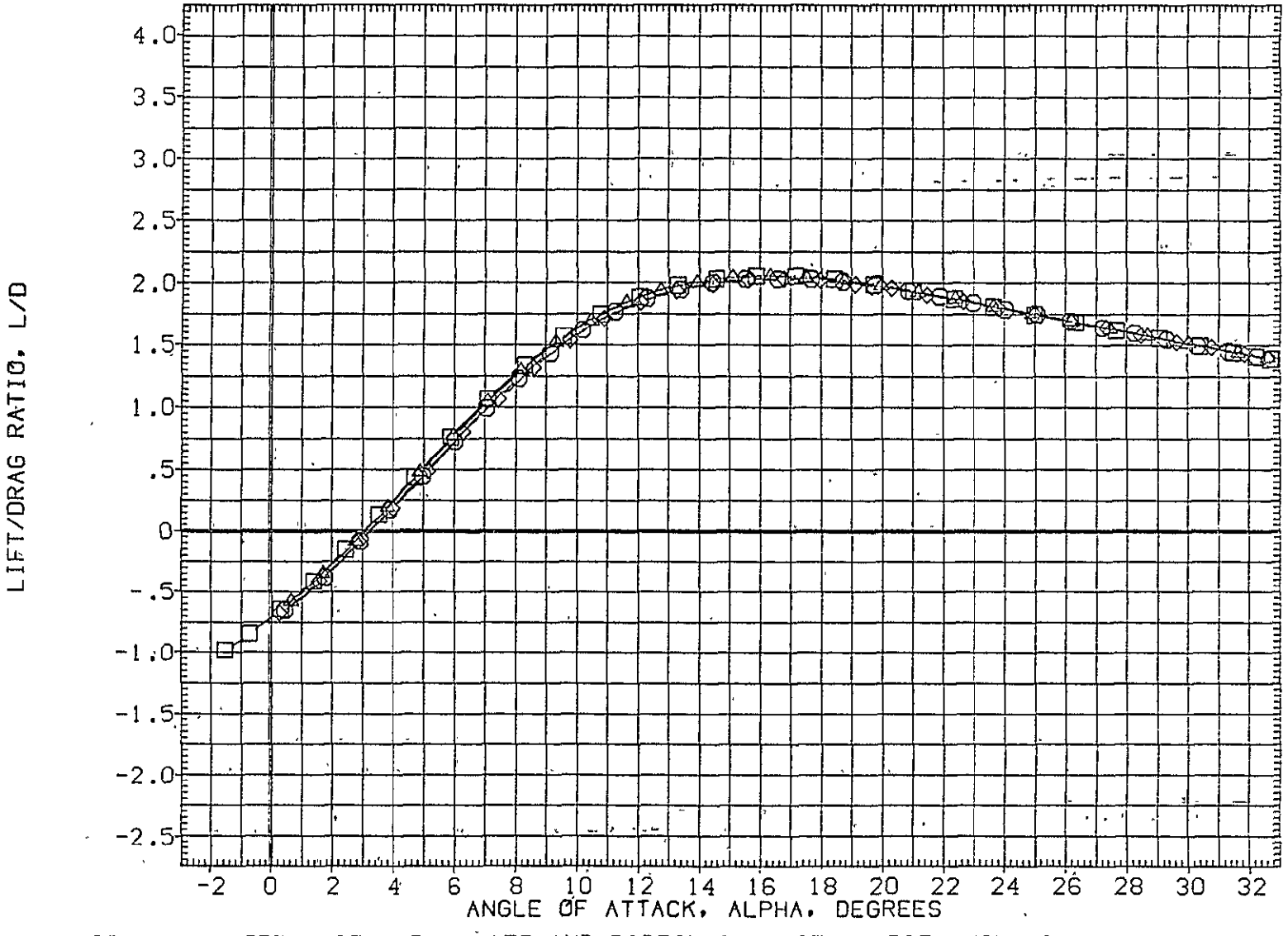


FIG 11 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) -ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

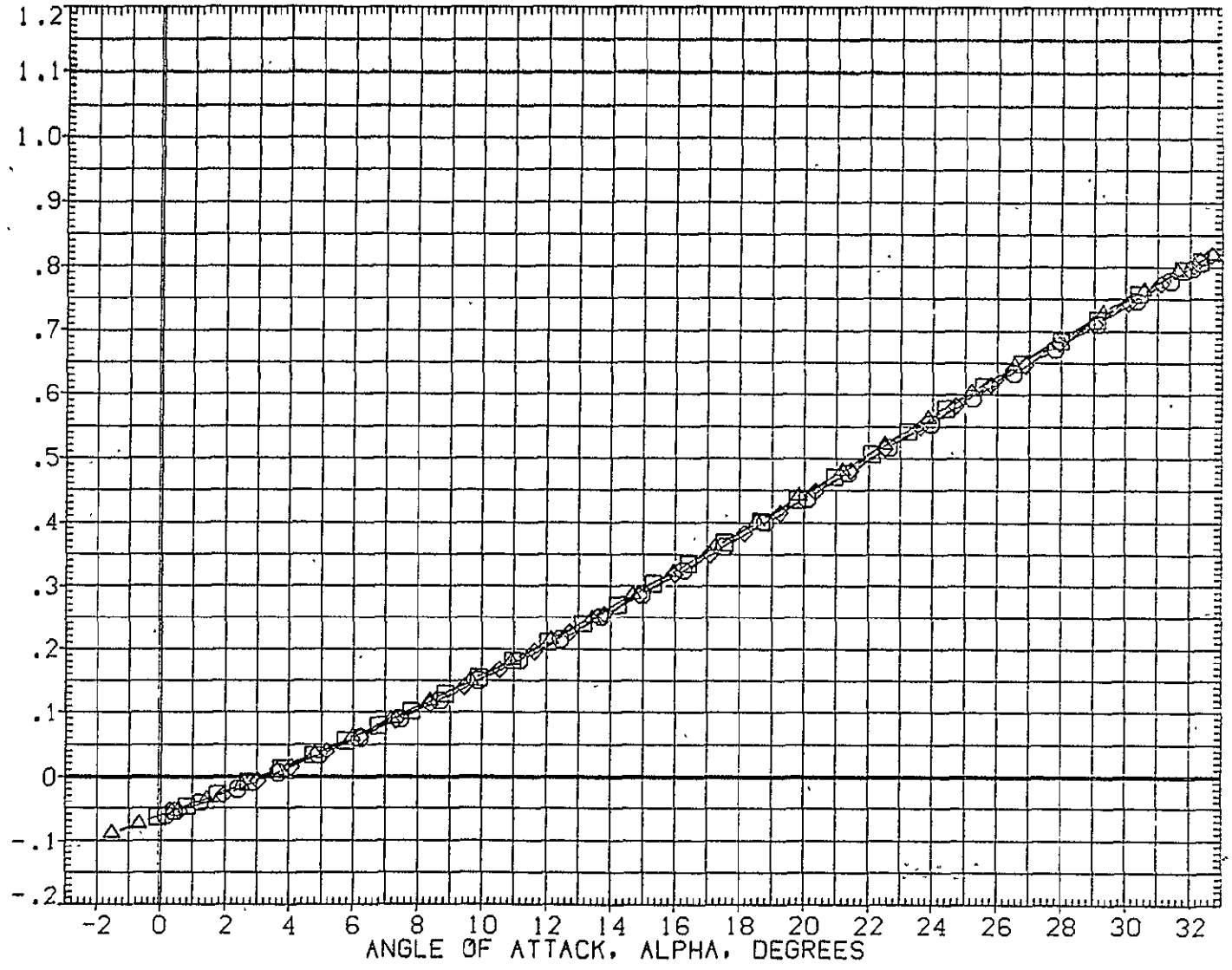


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

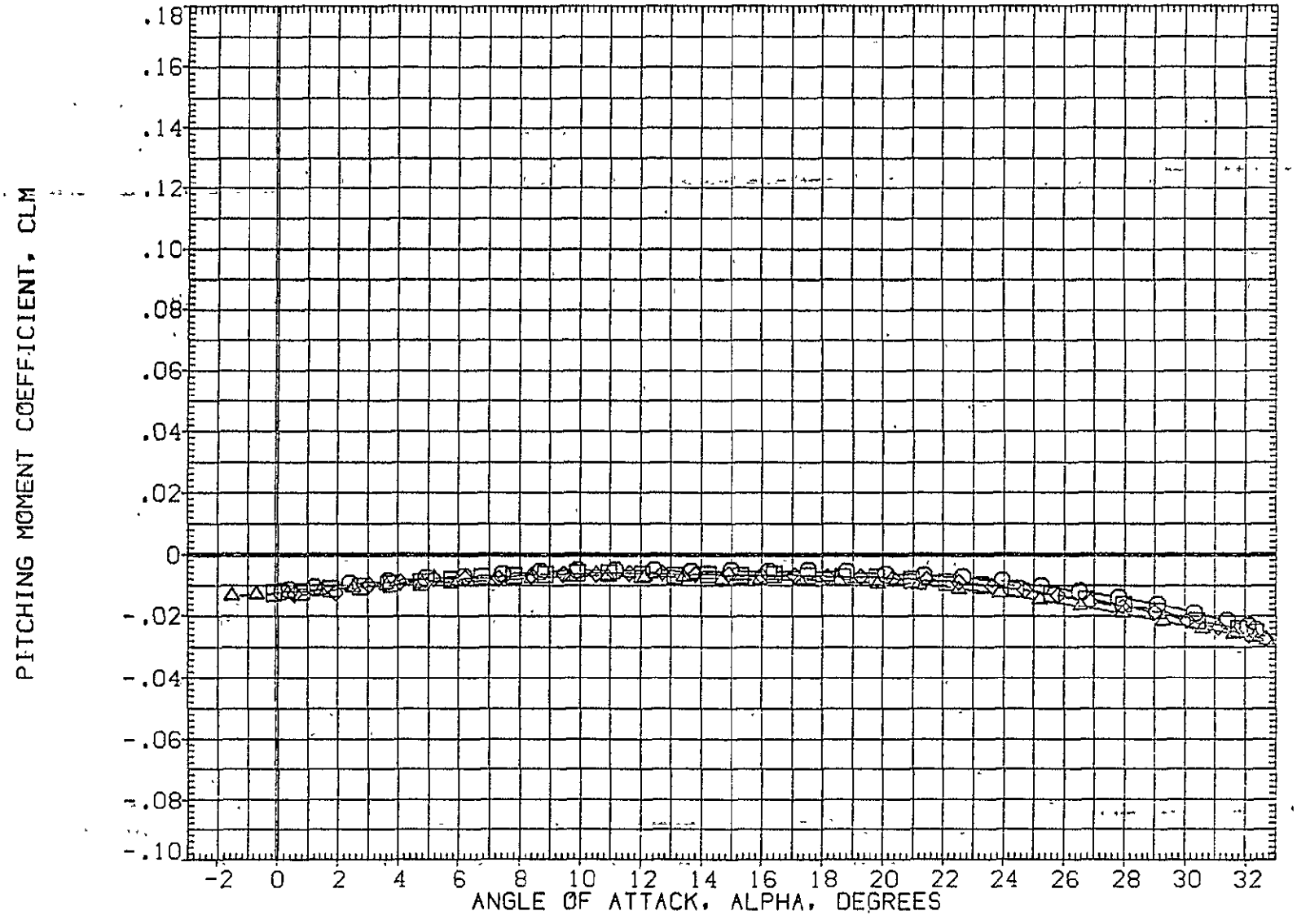


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

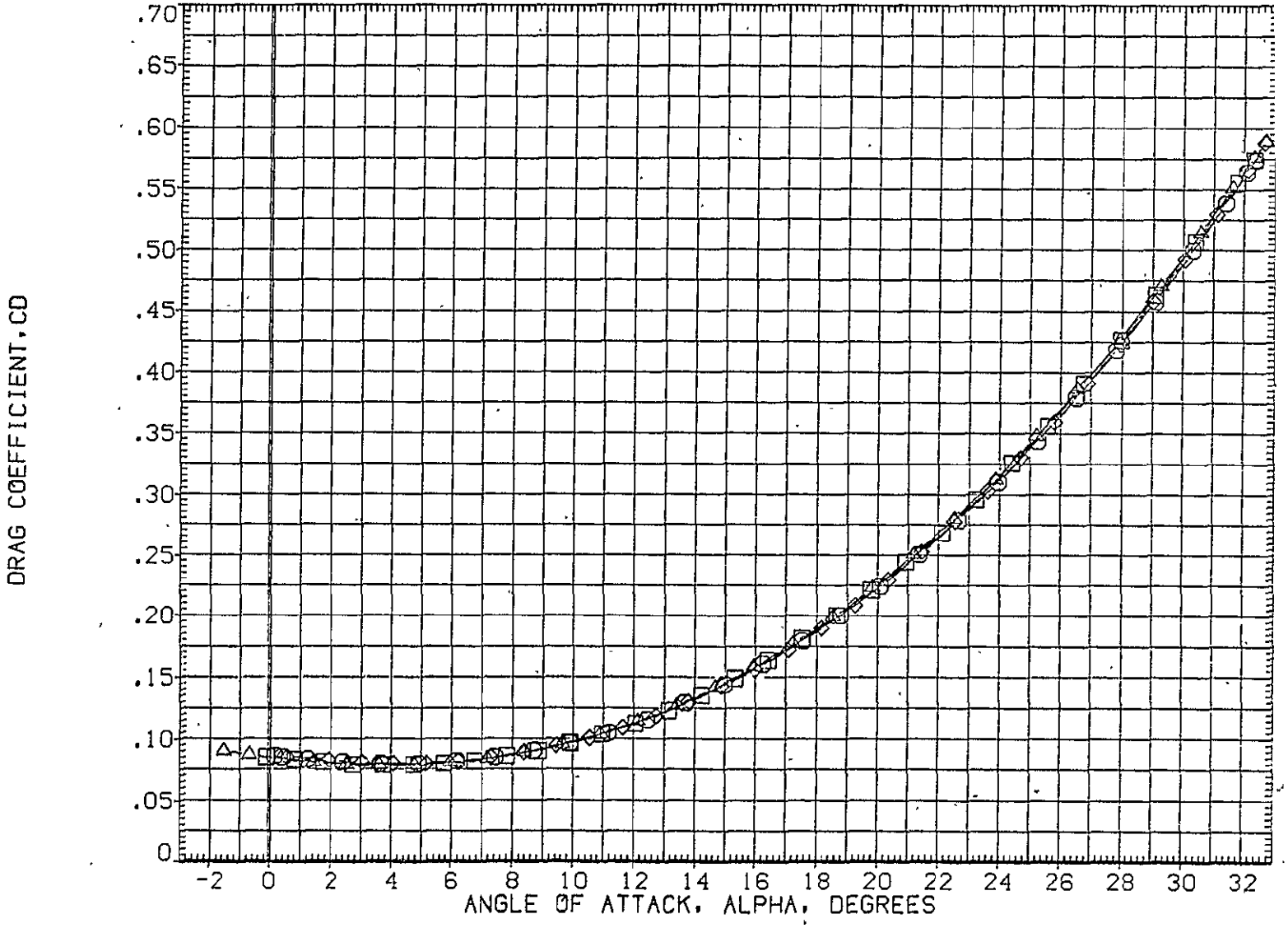


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

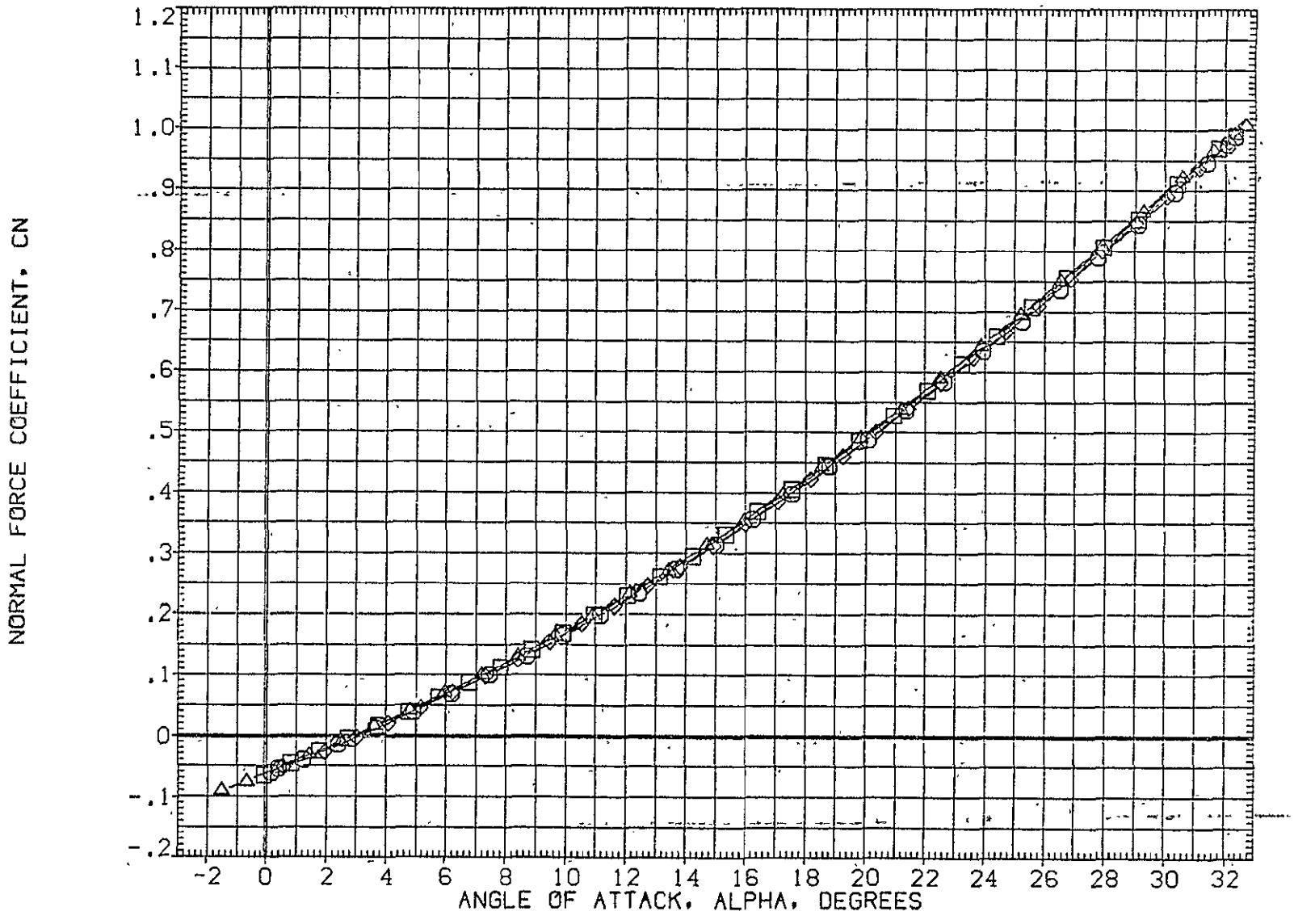


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

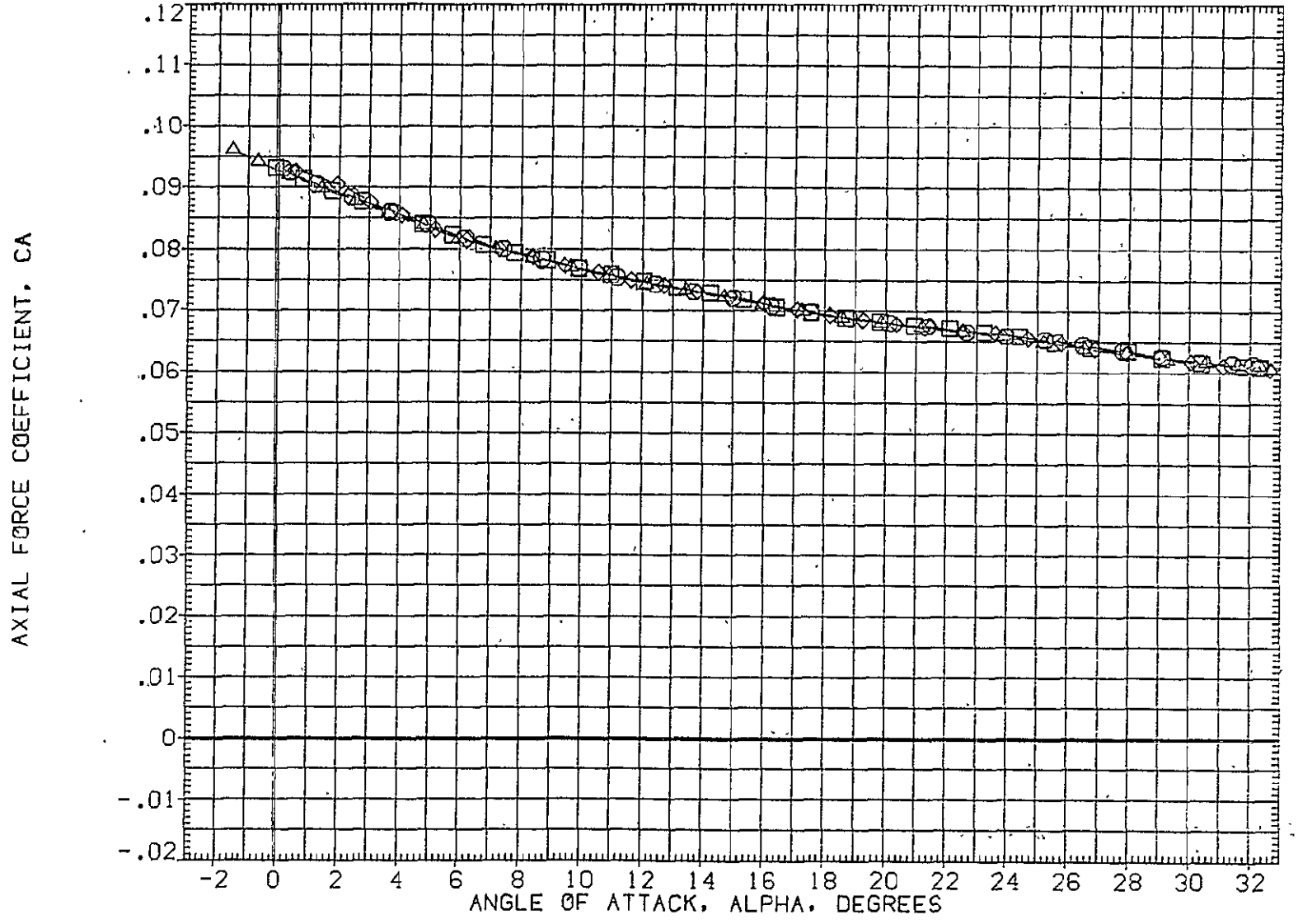


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

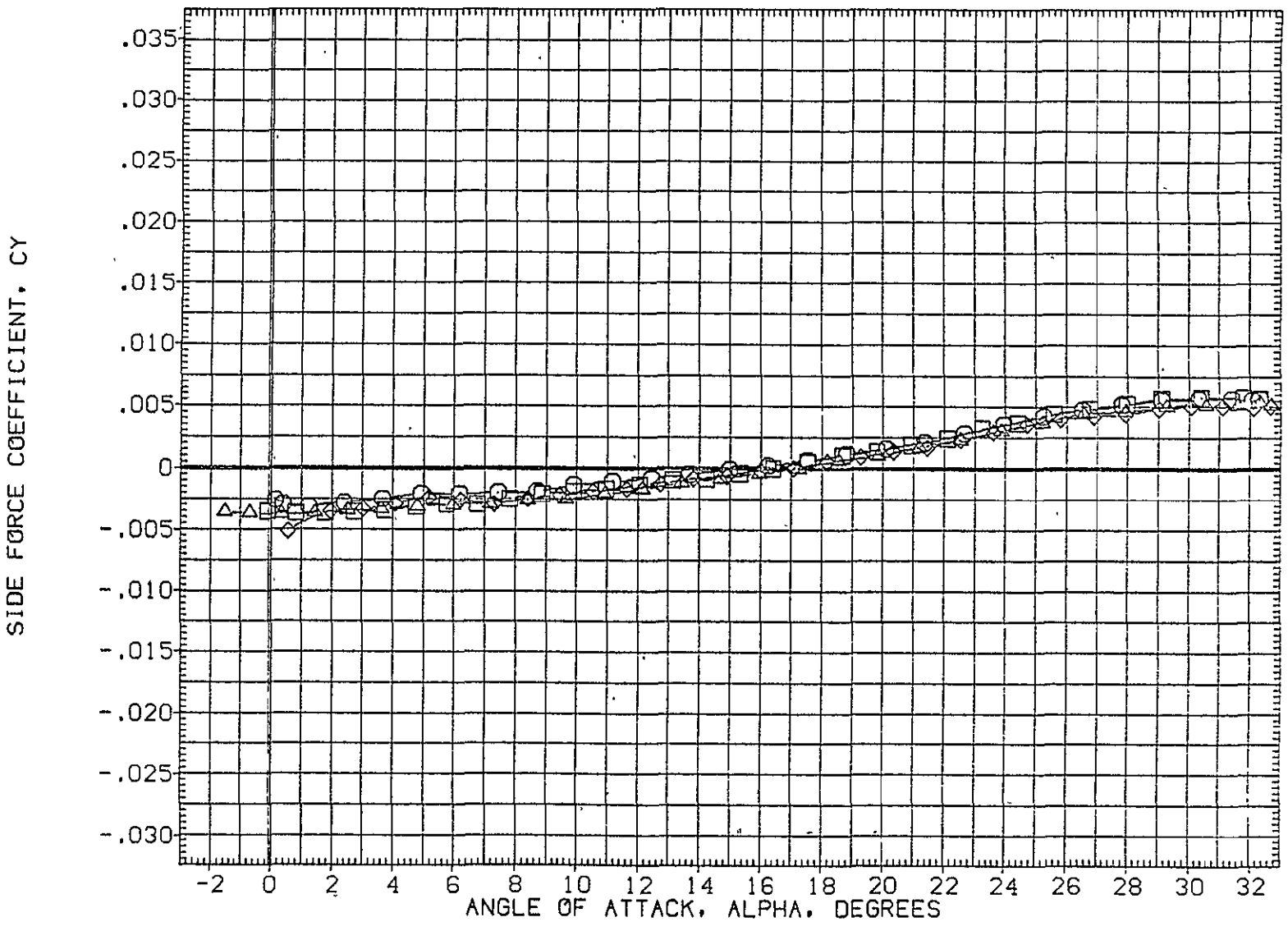


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

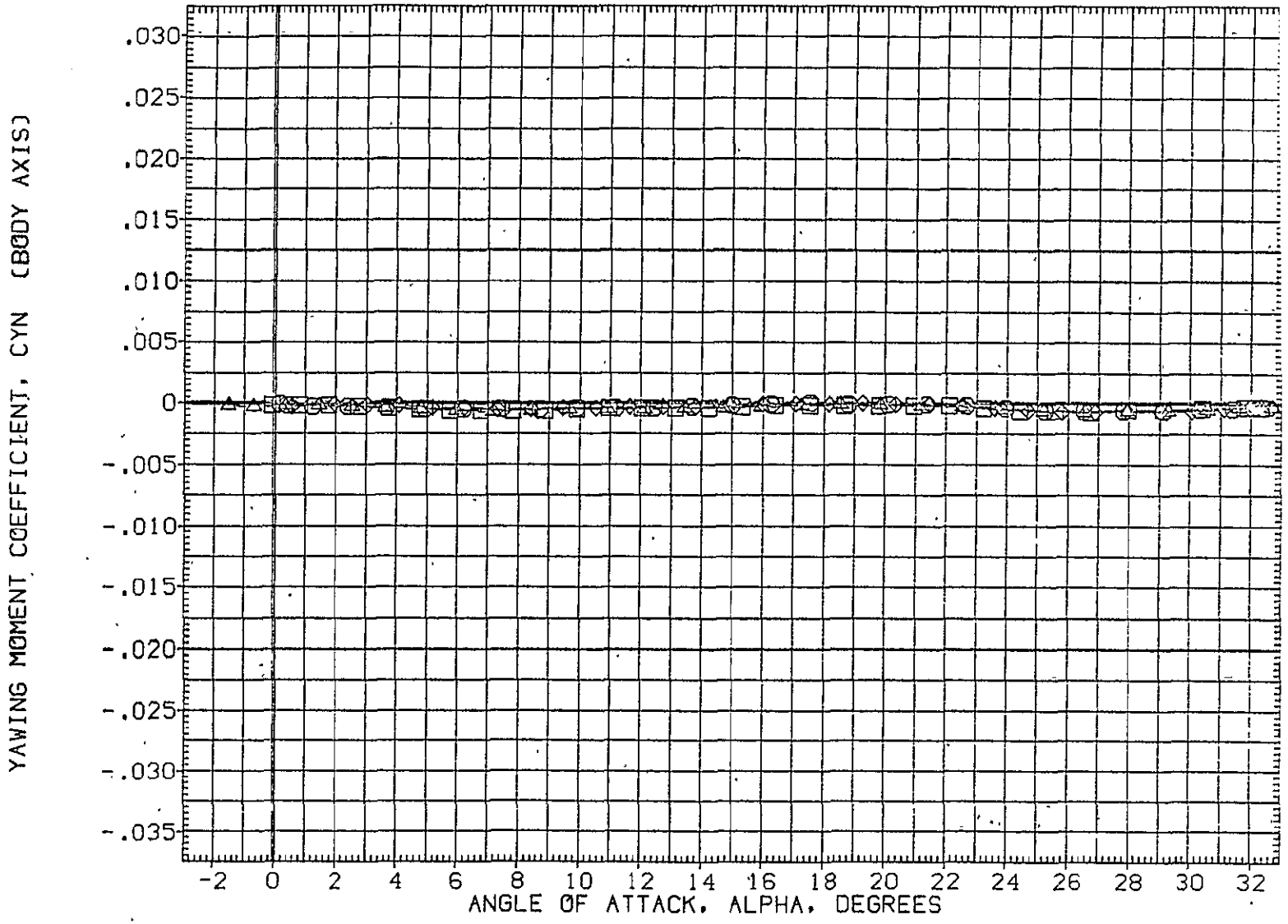


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

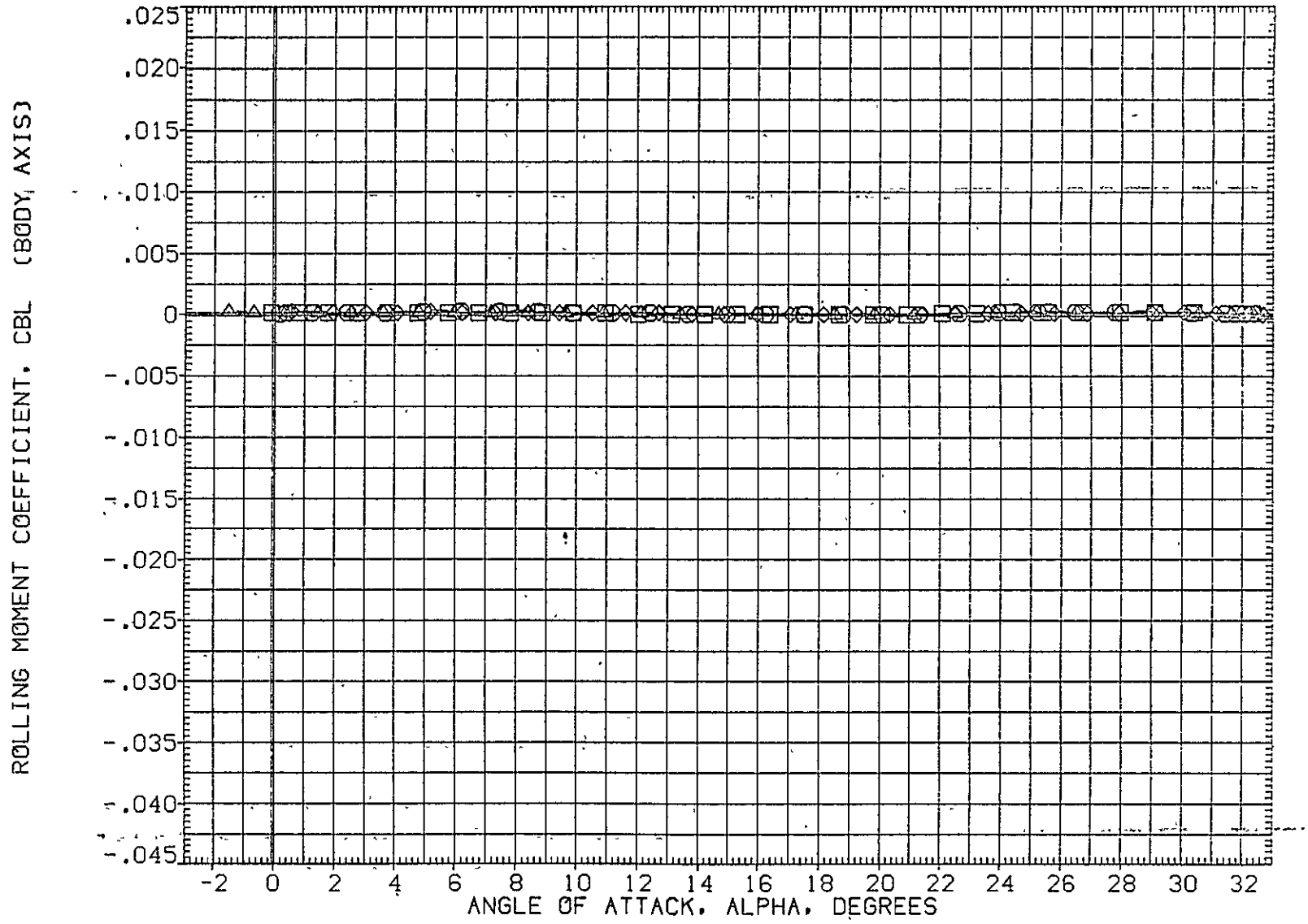


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY004)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY005)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY006)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY007)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

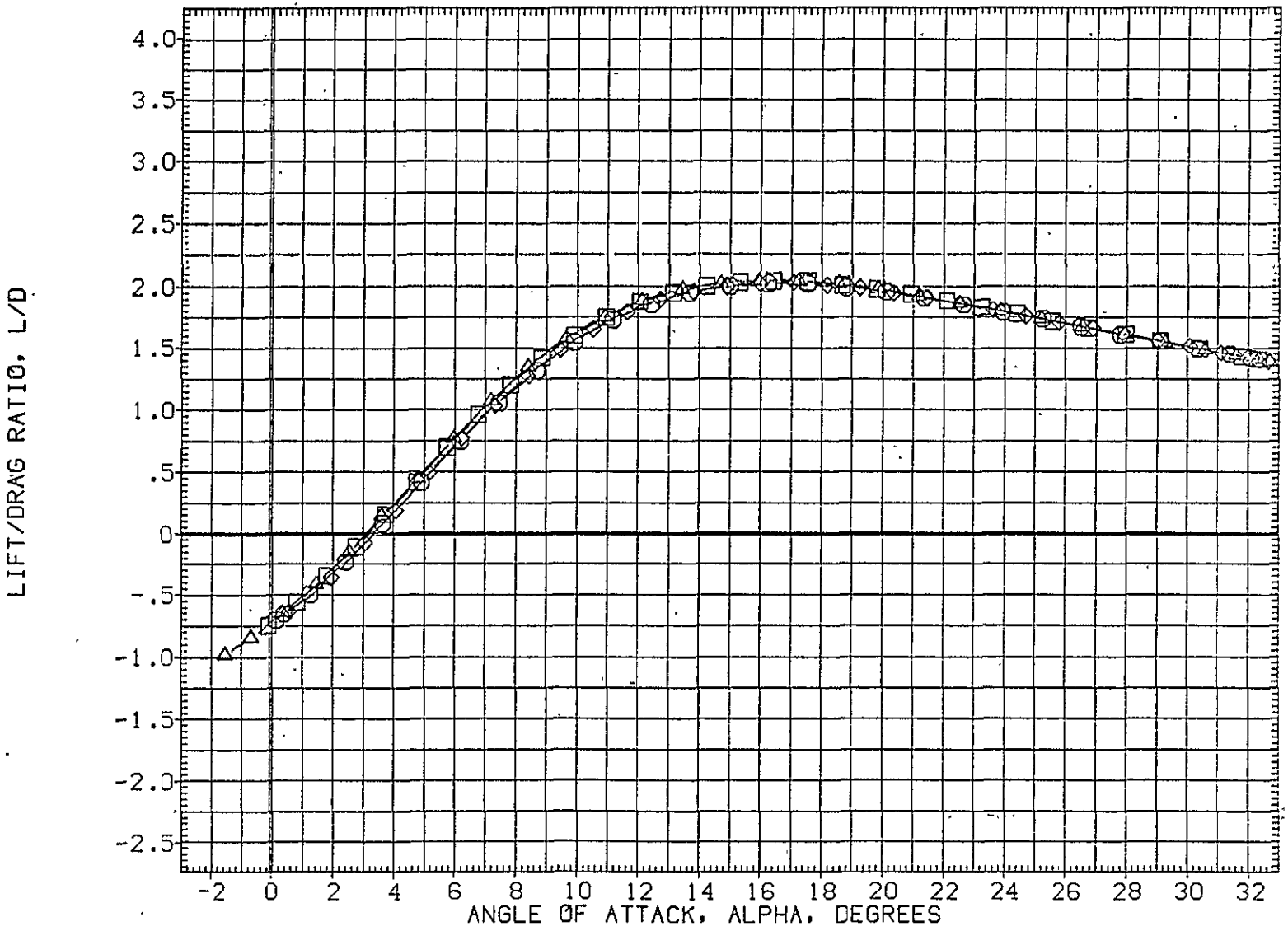


FIG 12 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

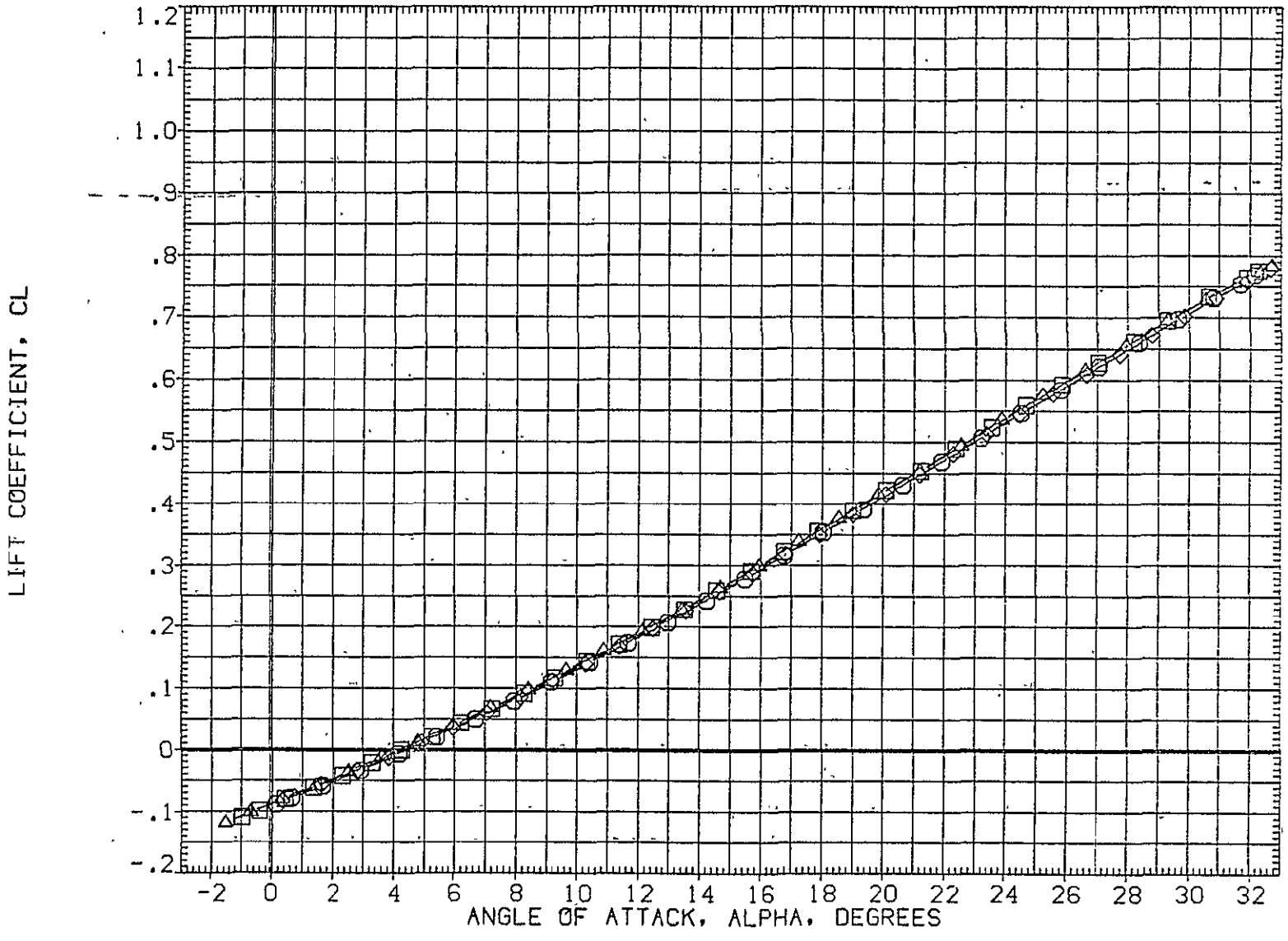


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

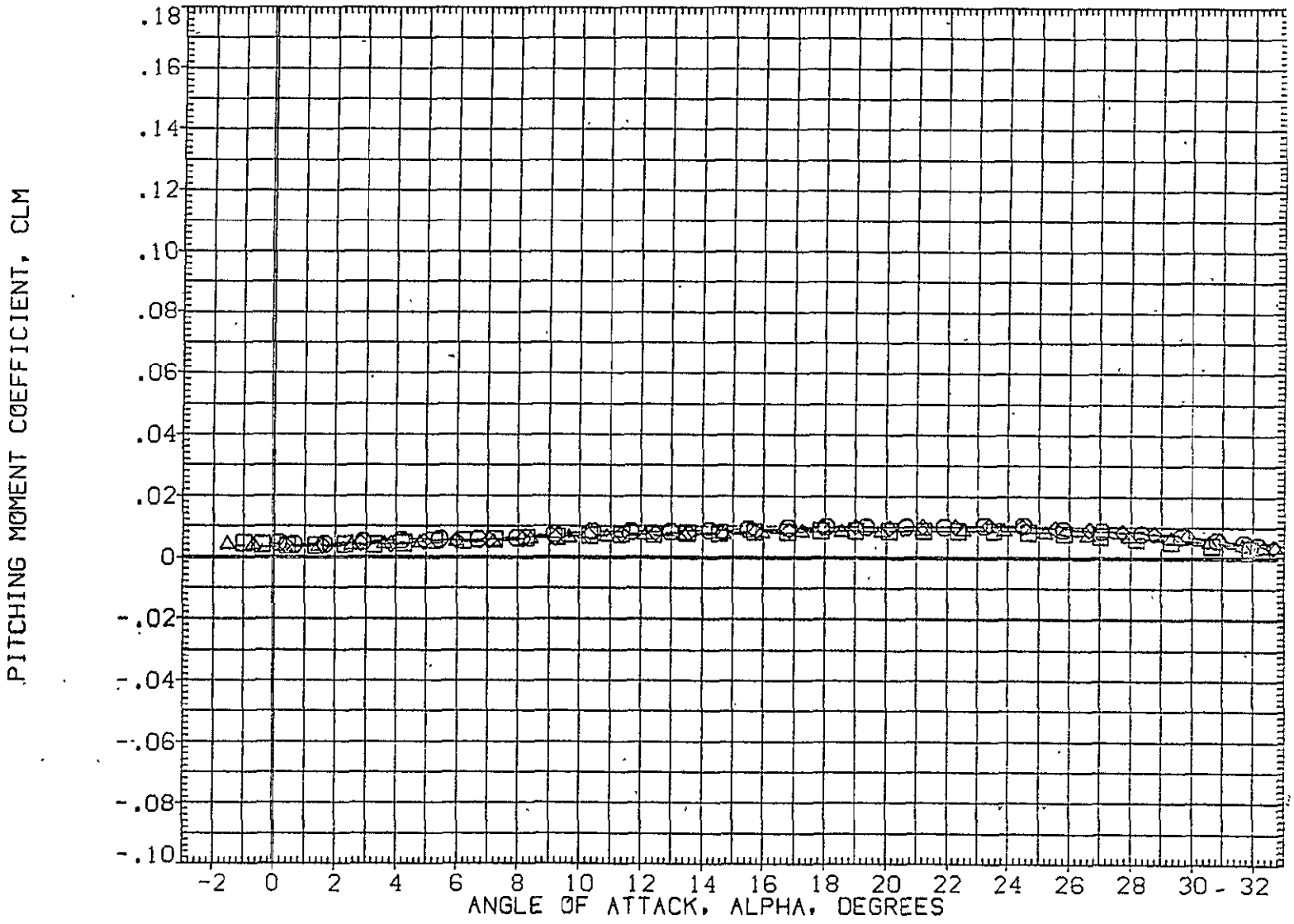


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2(

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

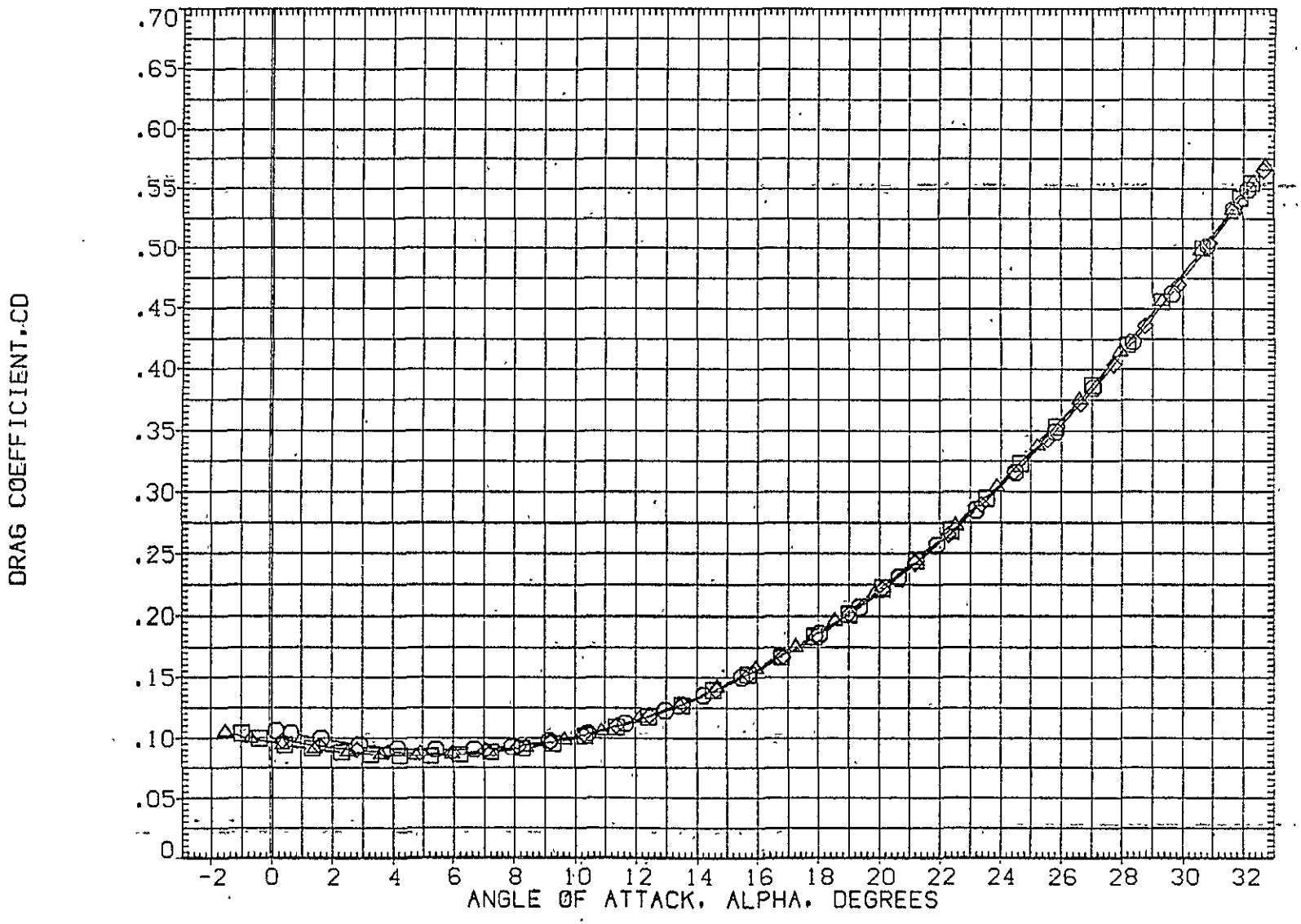


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

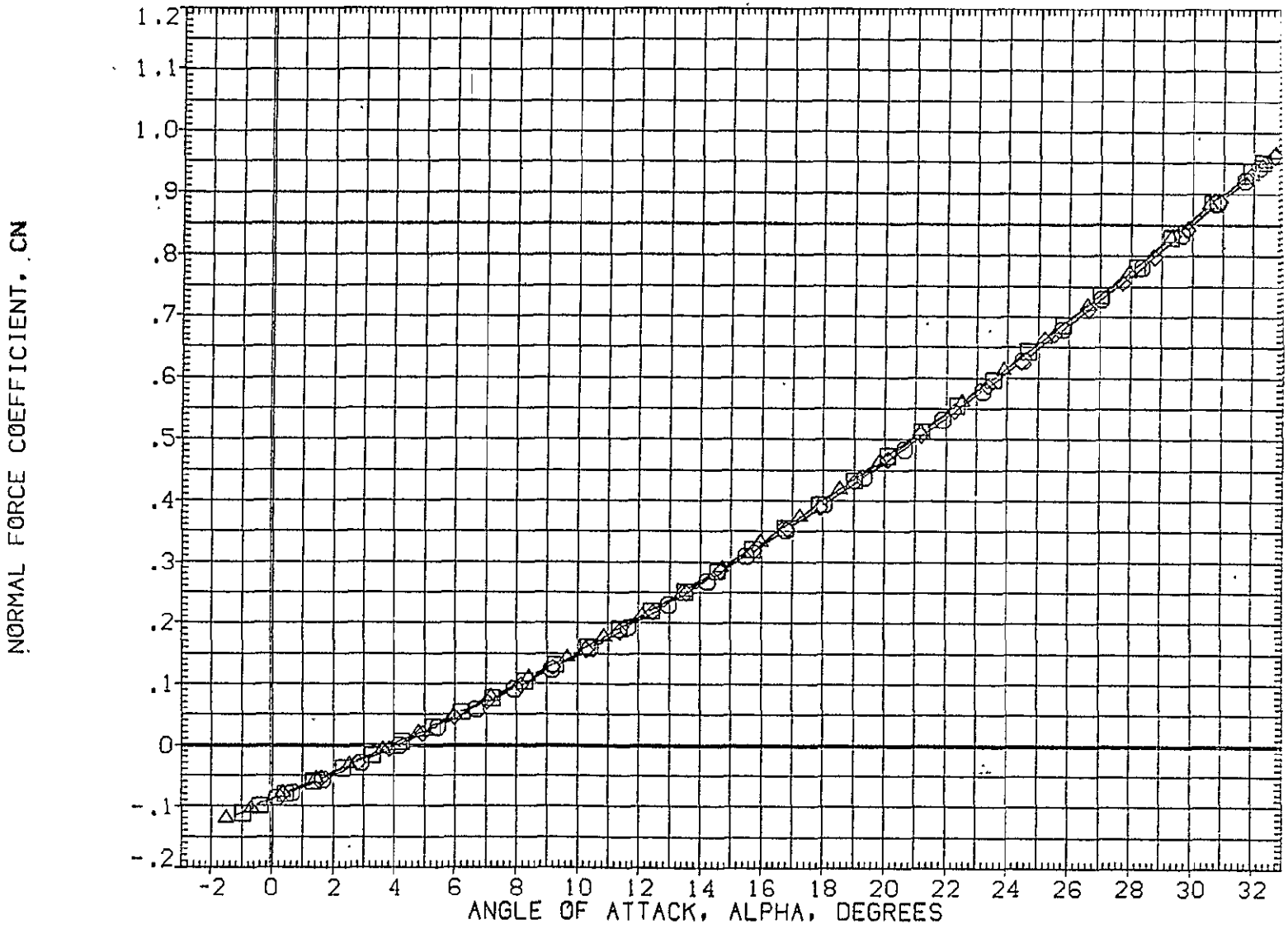


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	◇□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

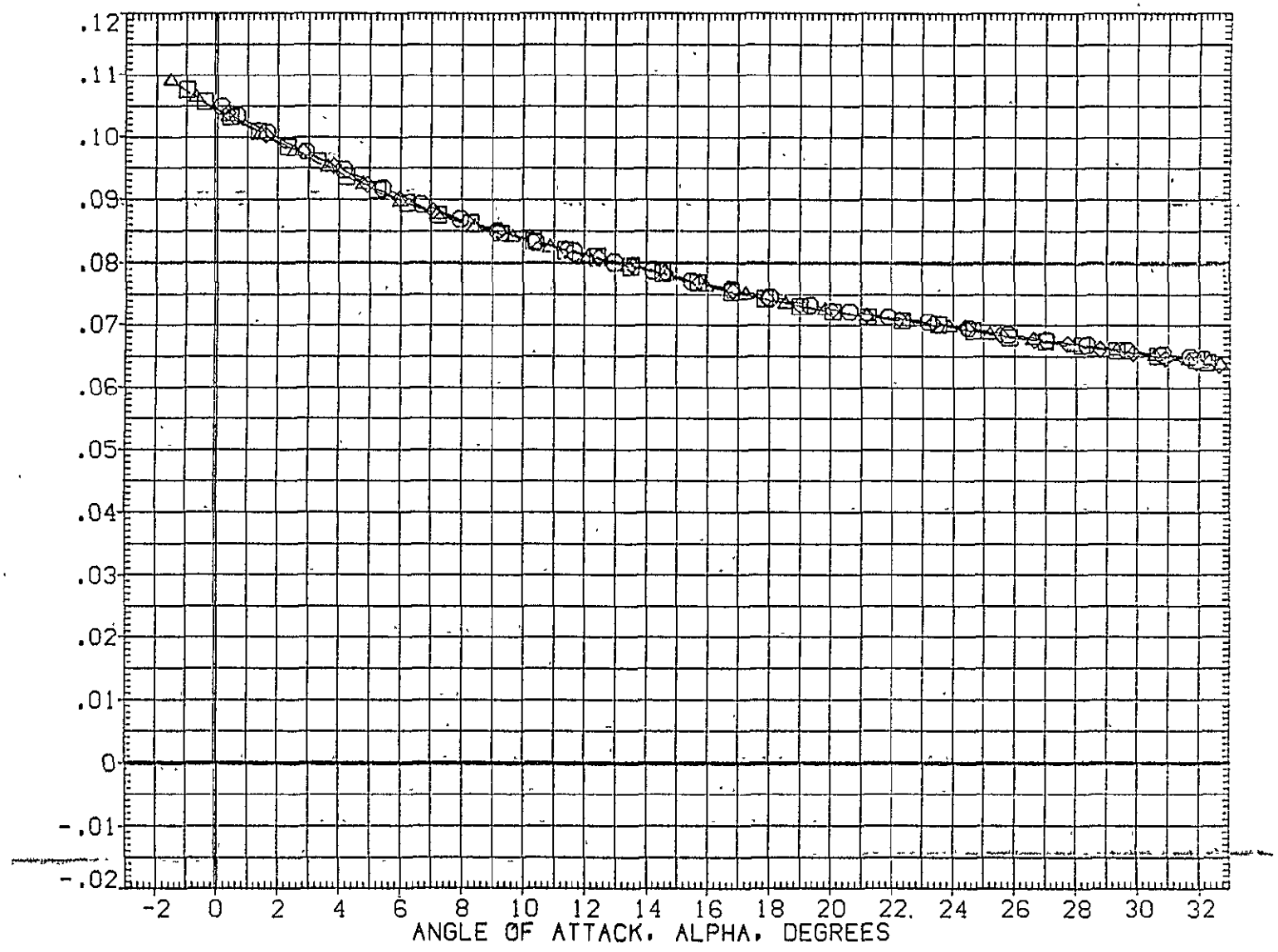


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

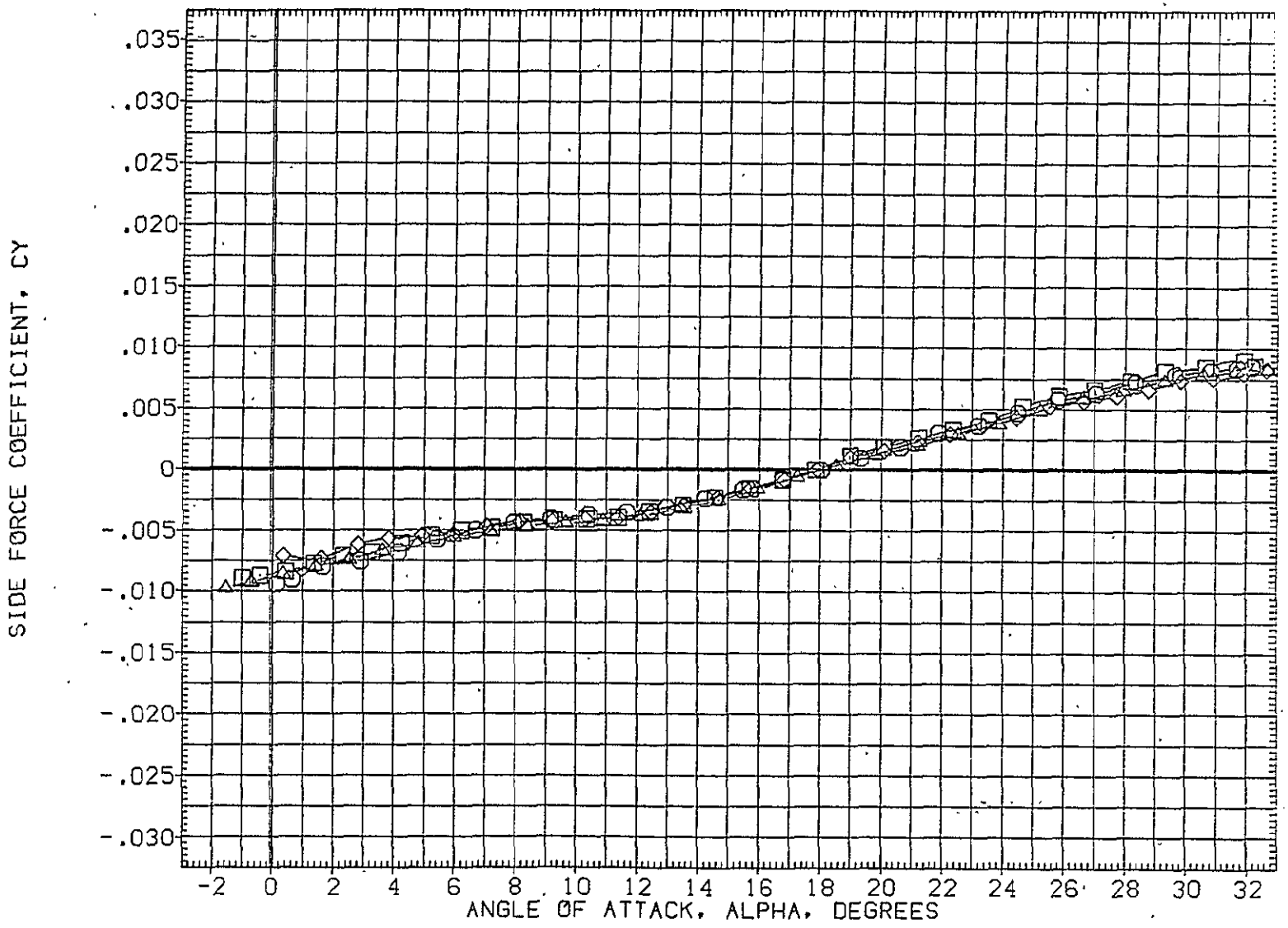


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

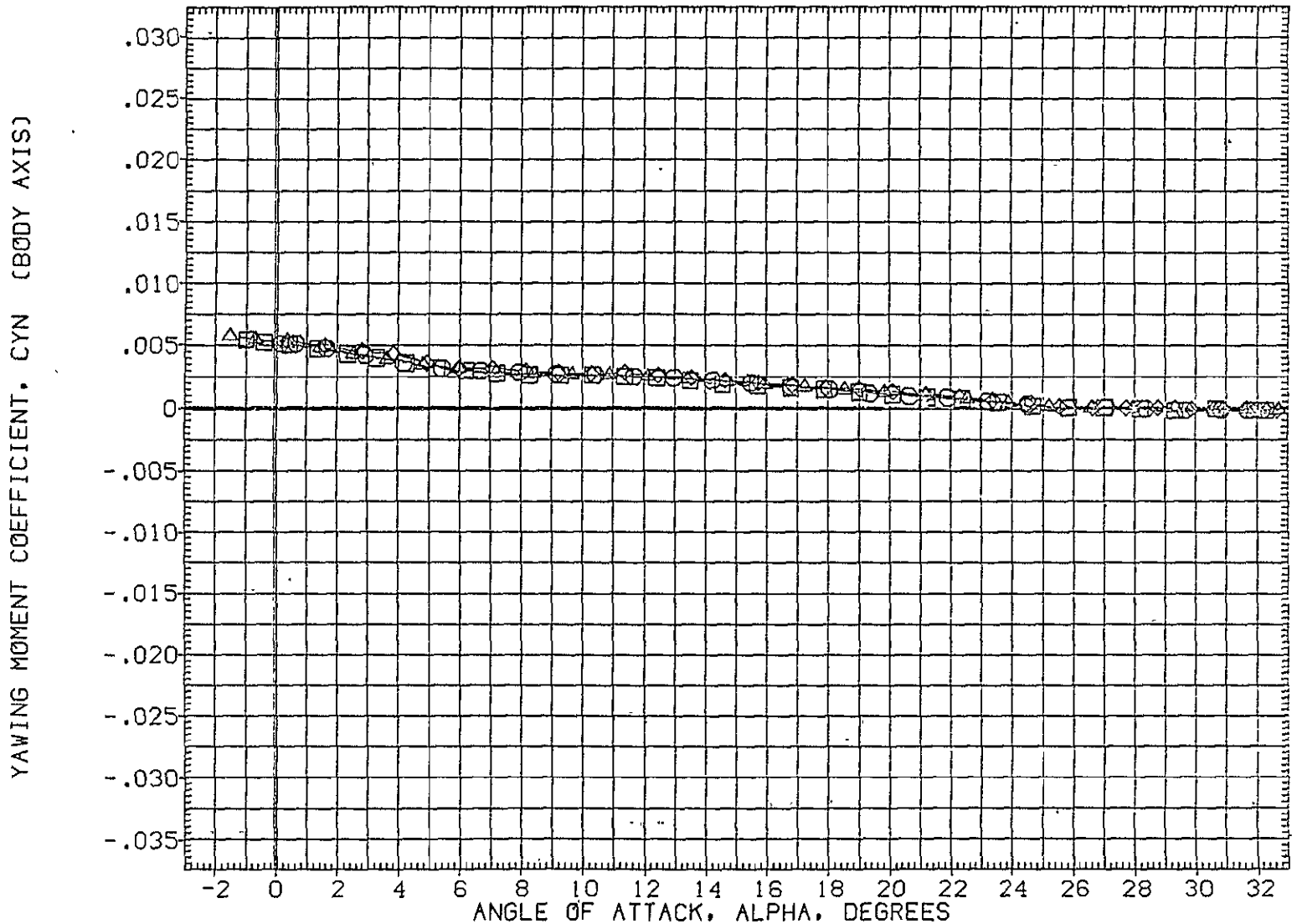


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

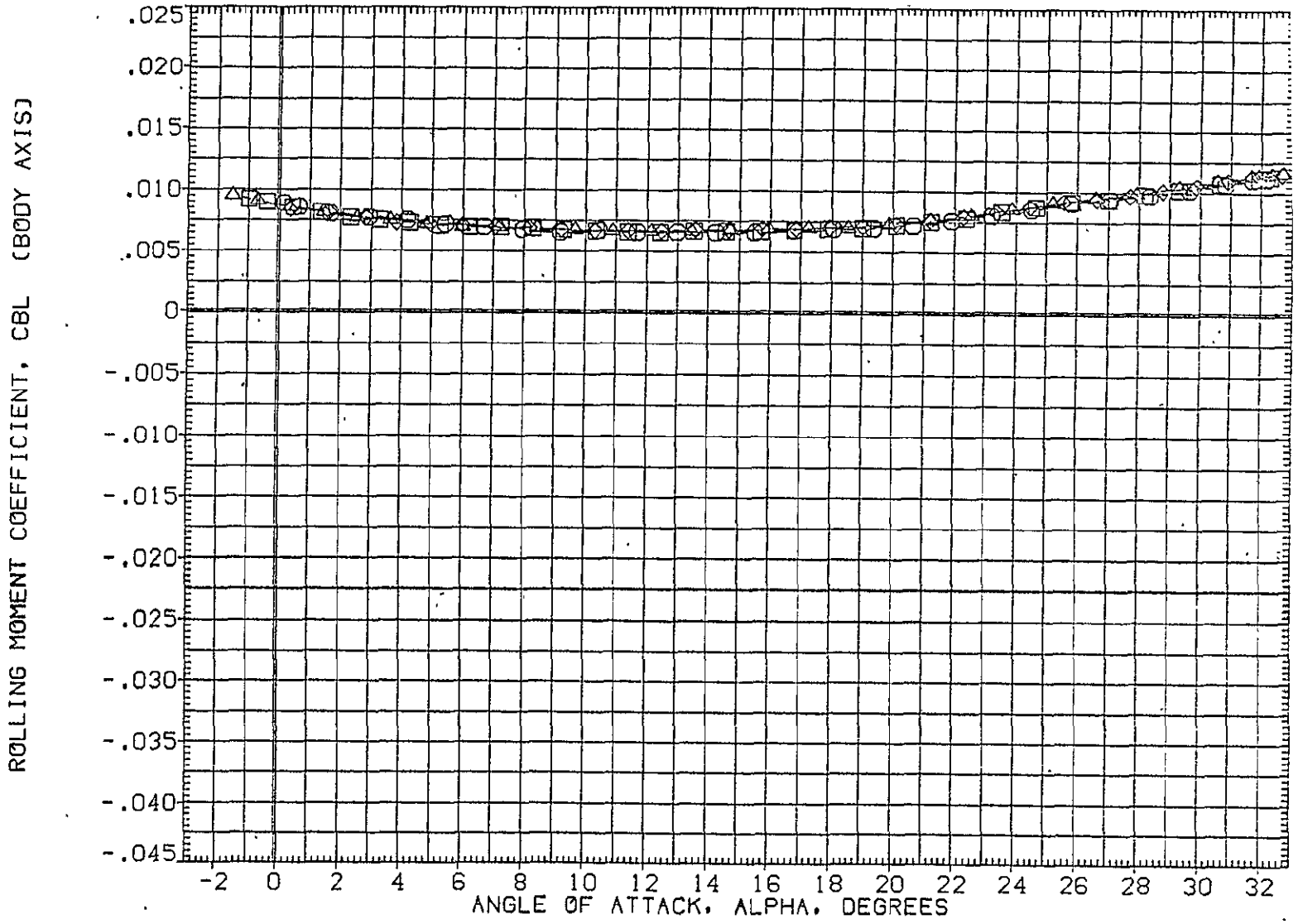


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2(

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY020)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY021)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY022)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY023)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

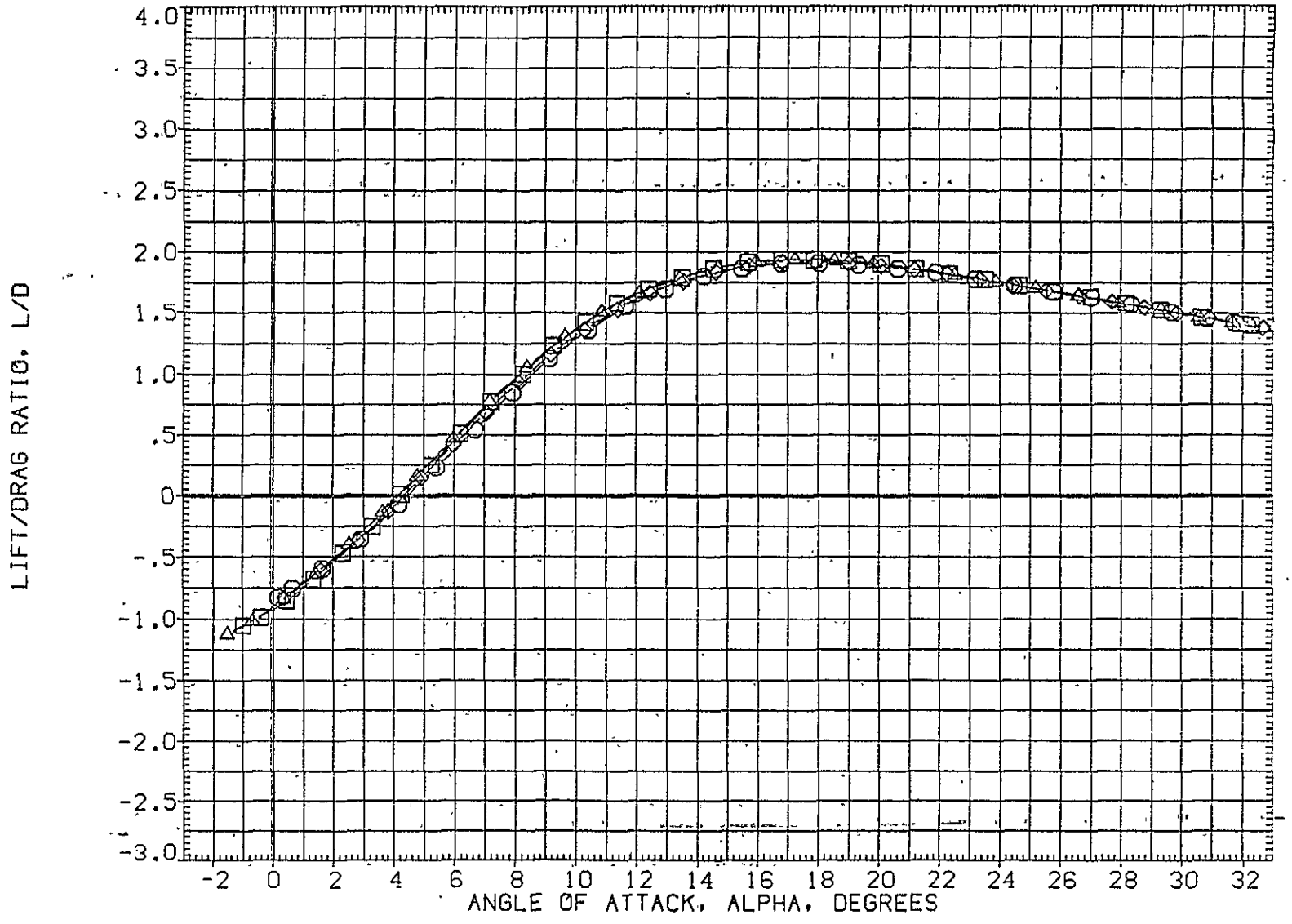


FIG 13 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

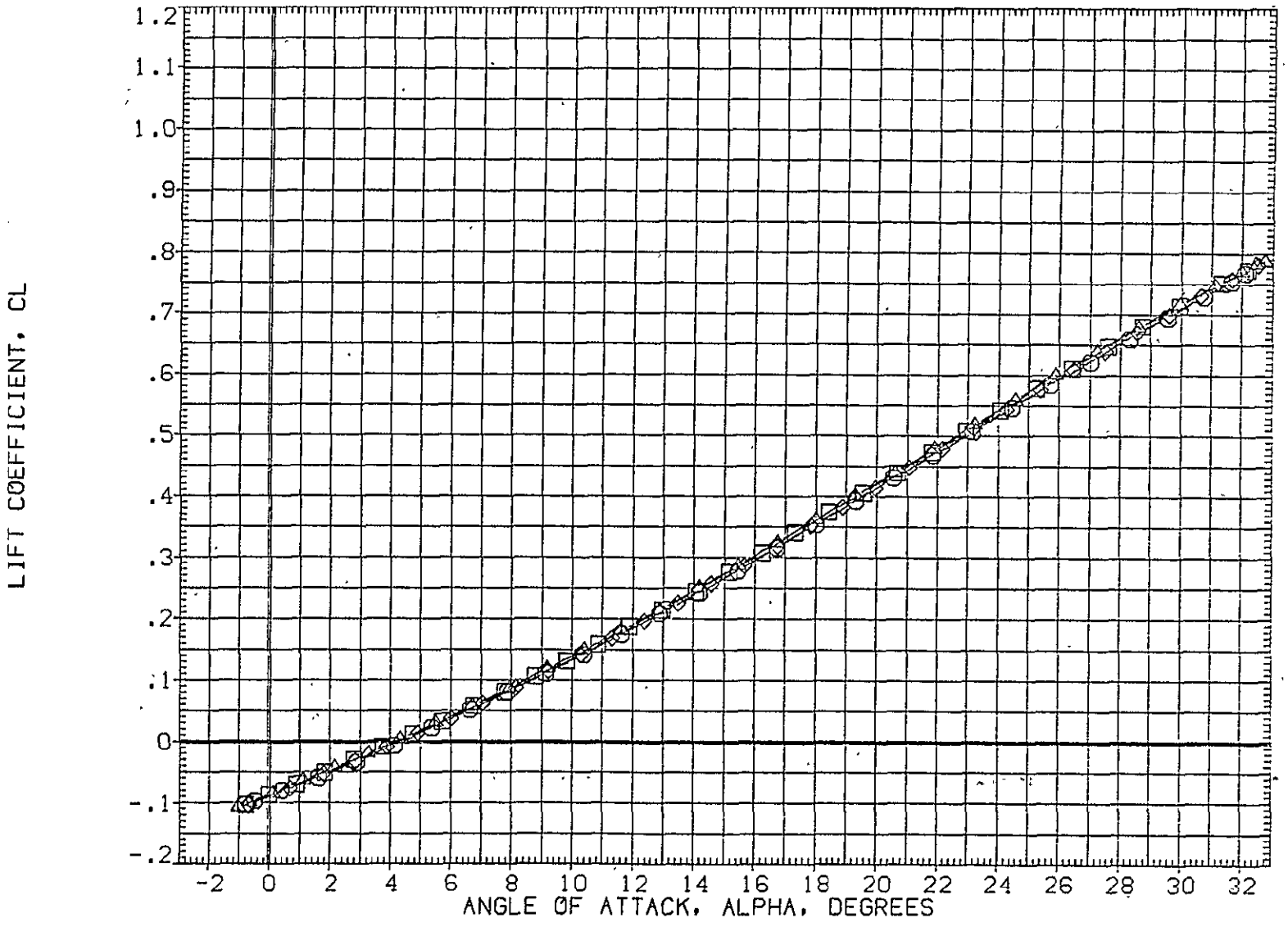


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

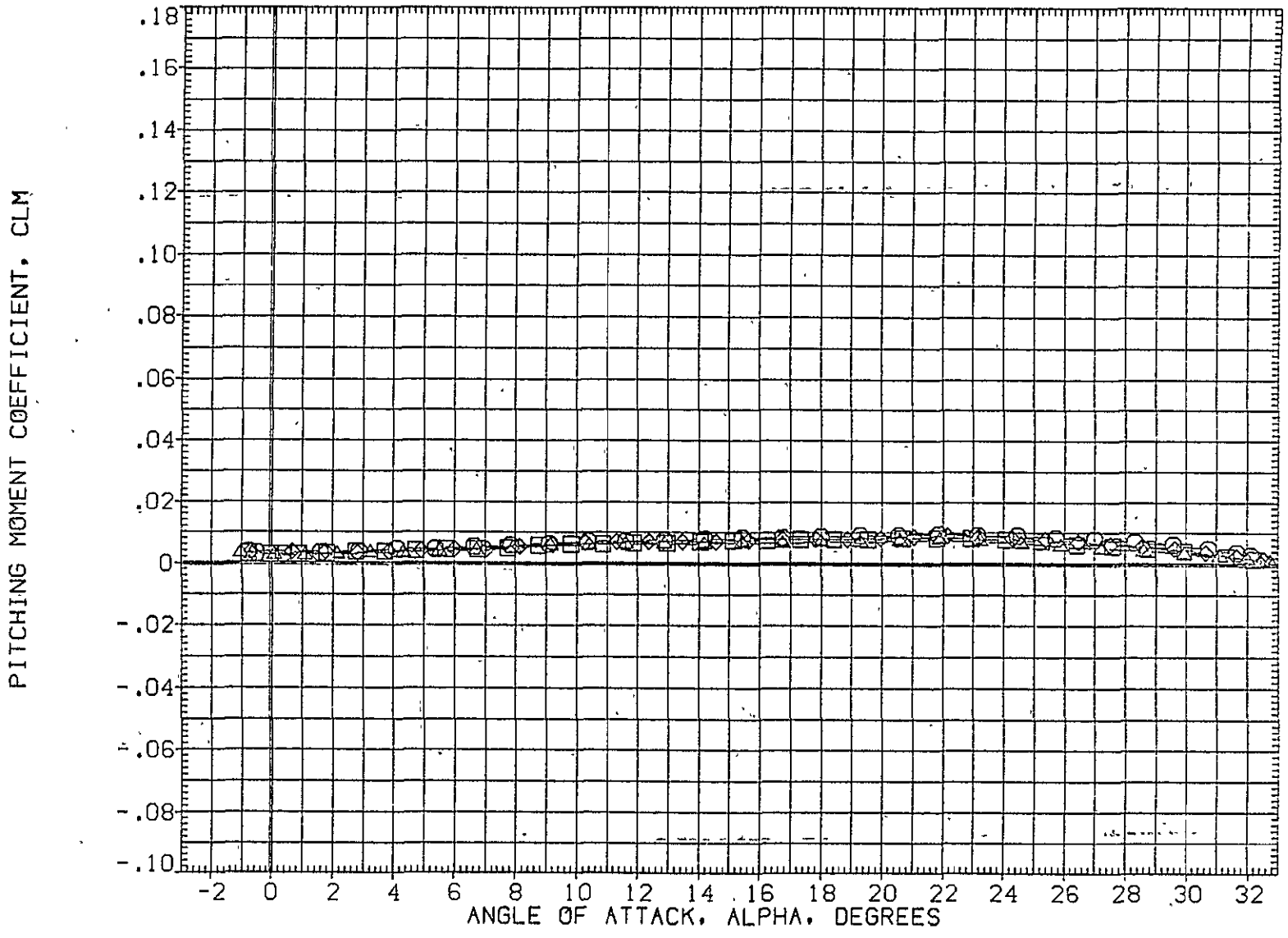


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

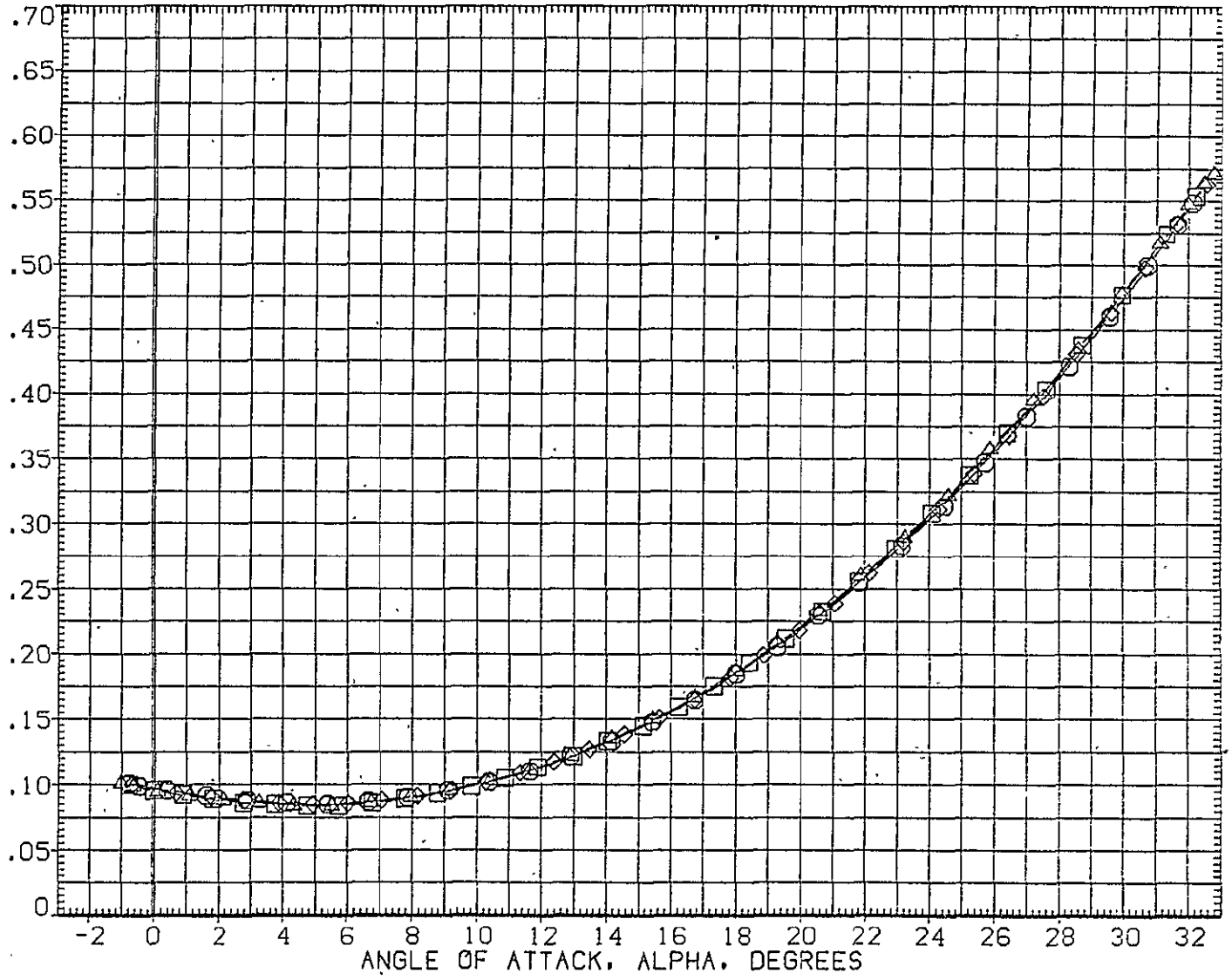


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

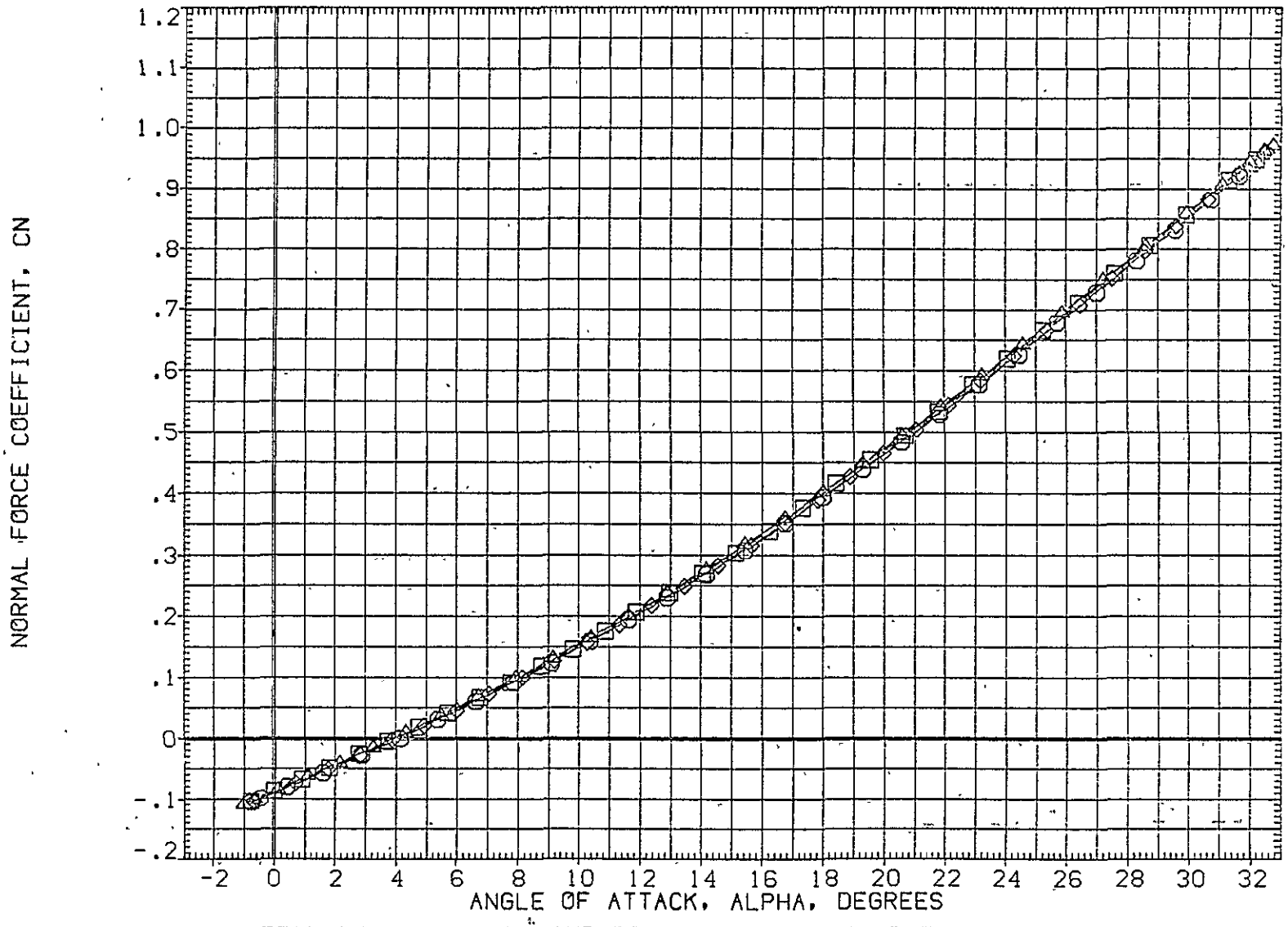


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

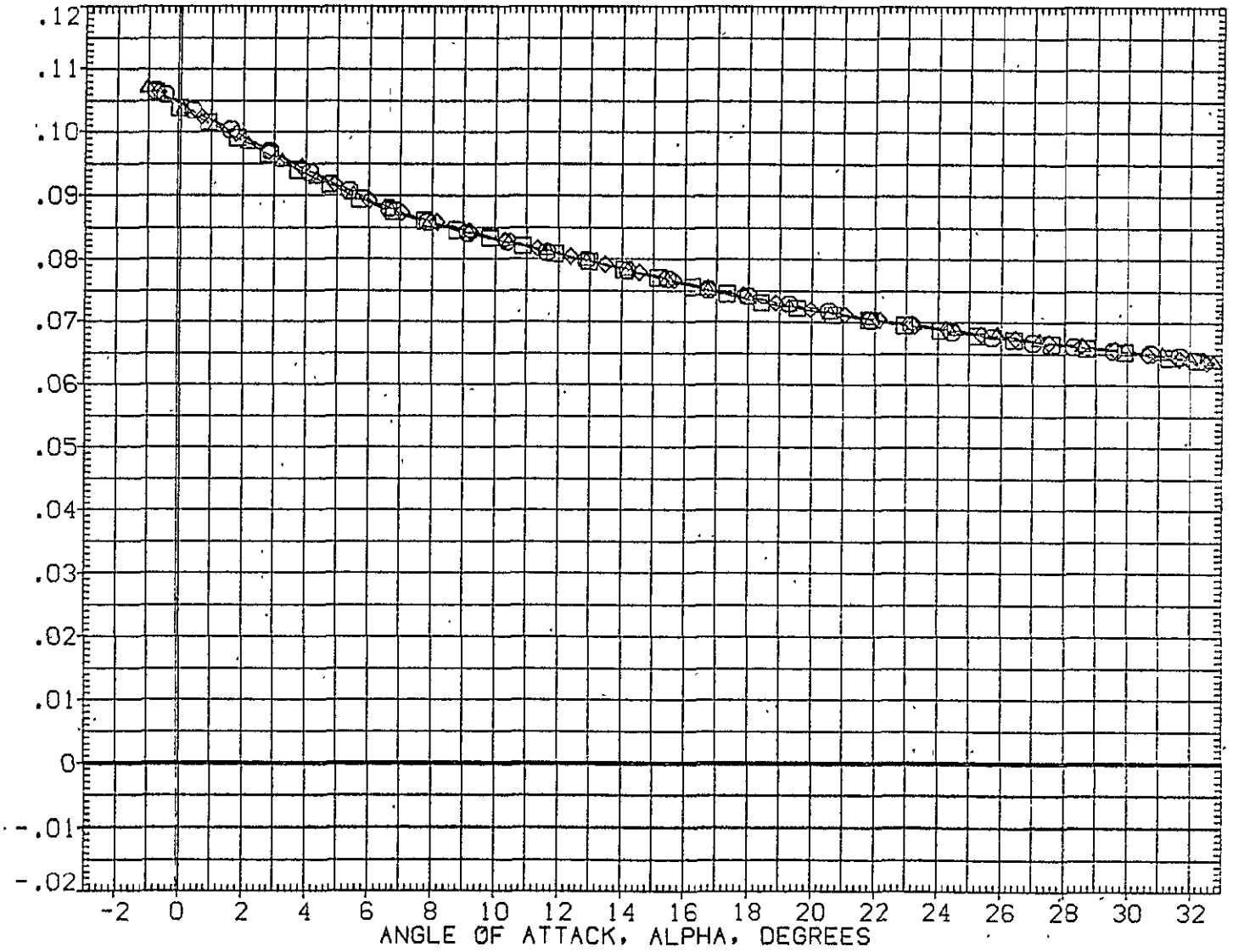


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

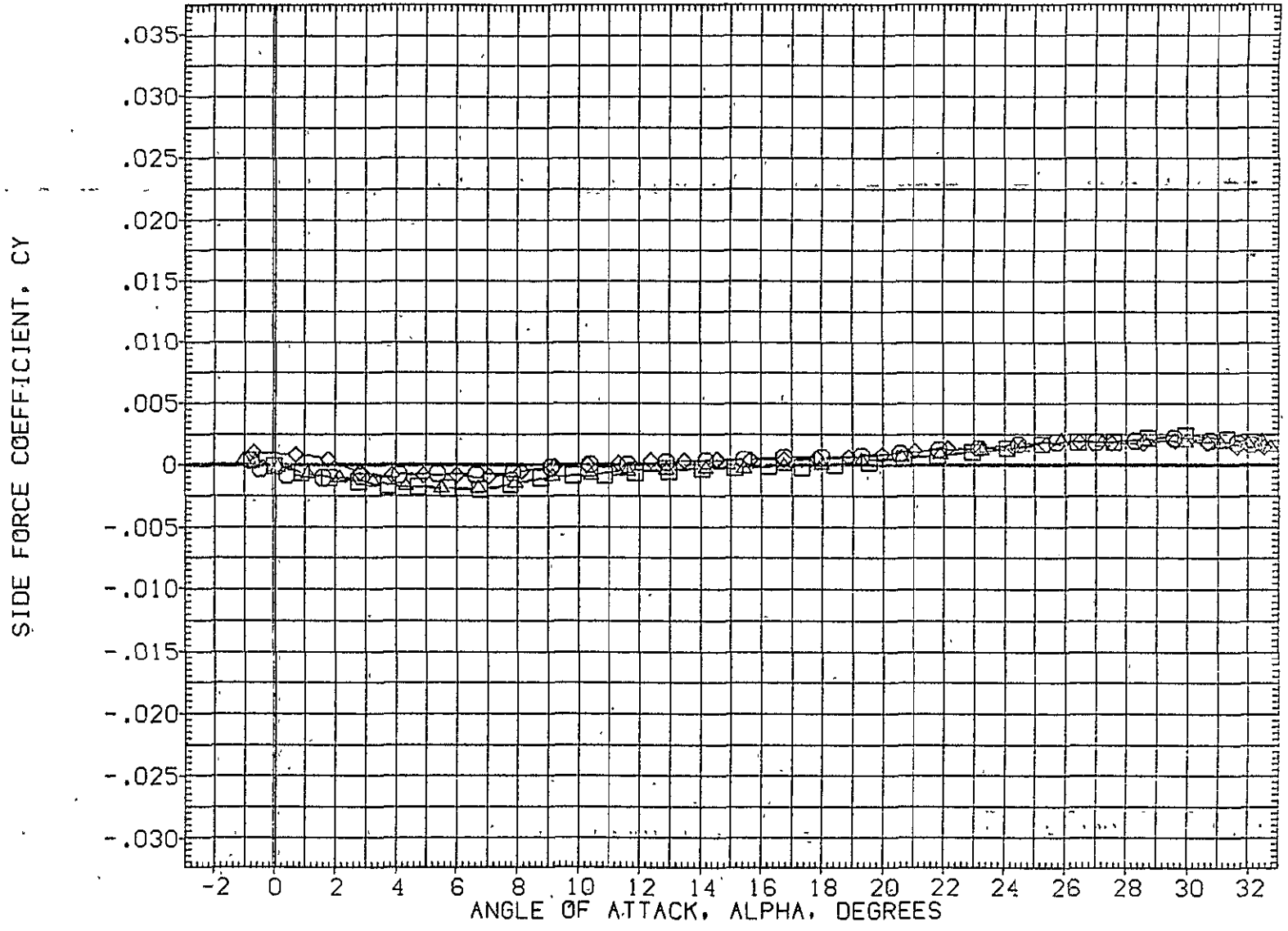


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

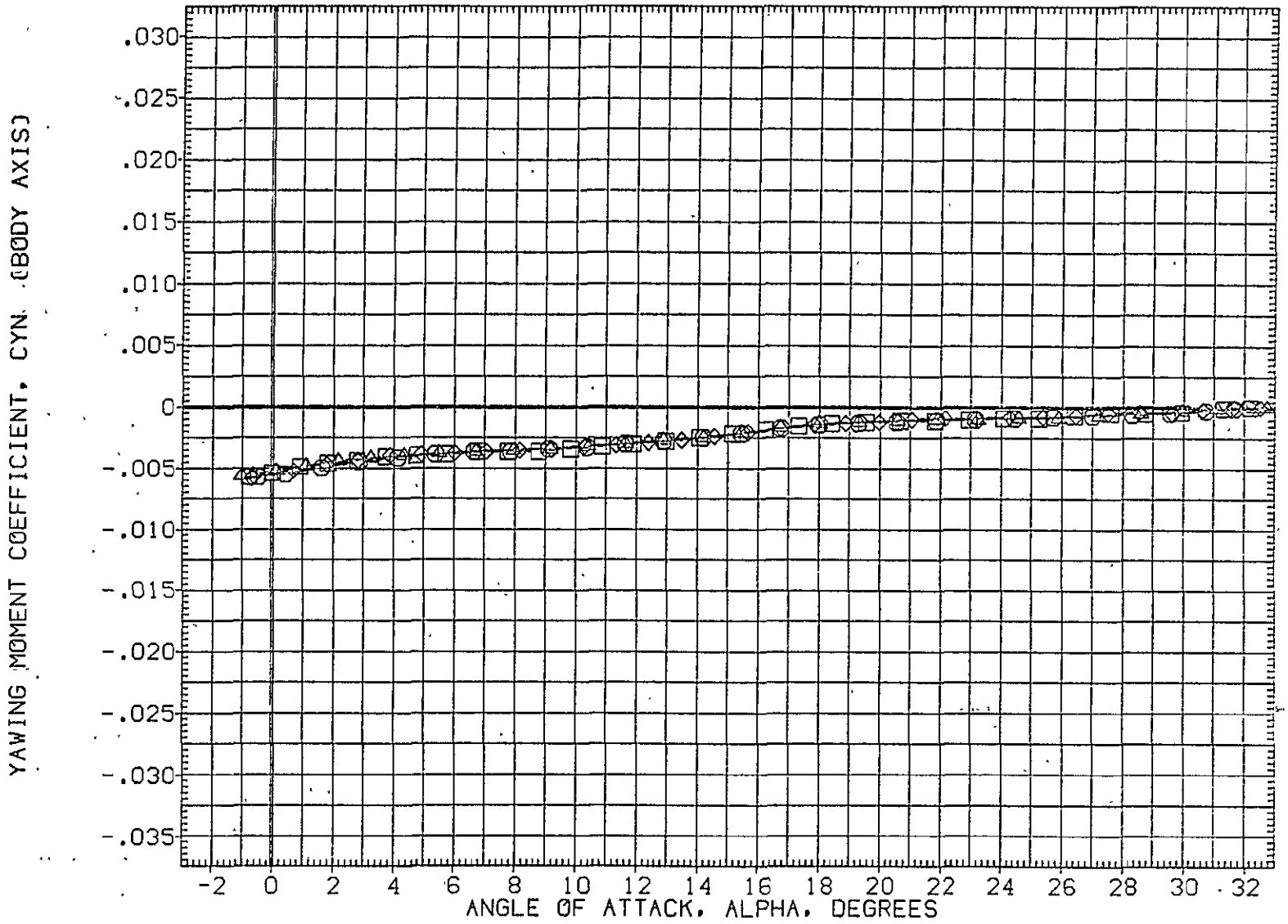


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2(

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY037)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

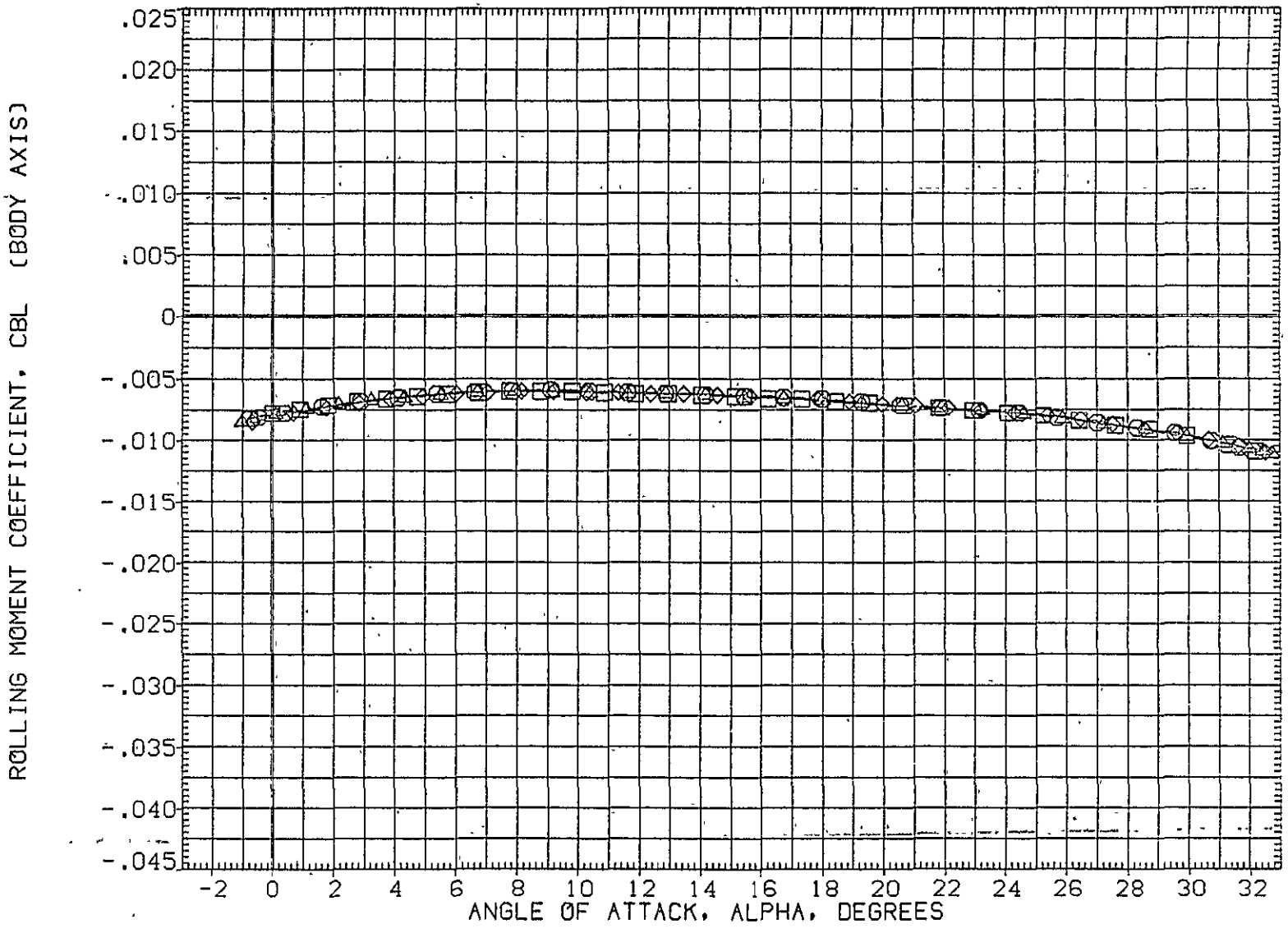


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY035)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	3.000	1.000
(RHY036)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	4.000	2.000
(RHY037)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	6.000	1.000
(RHY038)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

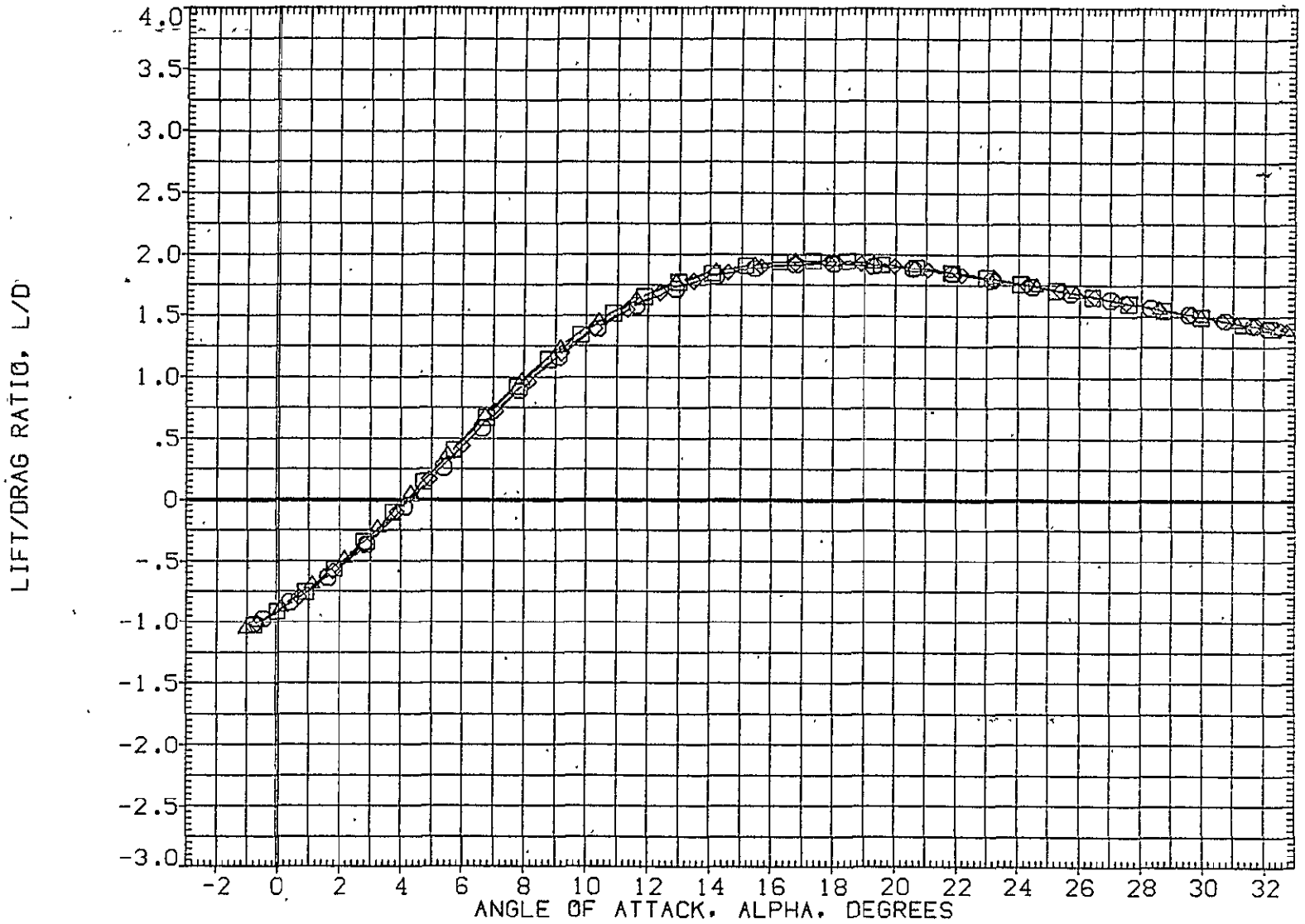


FIG 14 EFFECT OF ALPHA RATE AND DIRECTION(GRIT ON BOTH WINGS) ELEVON= -2(

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO15)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHYO16)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHYO17)	◪	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHYO18)	◪	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHYO19)	◪	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

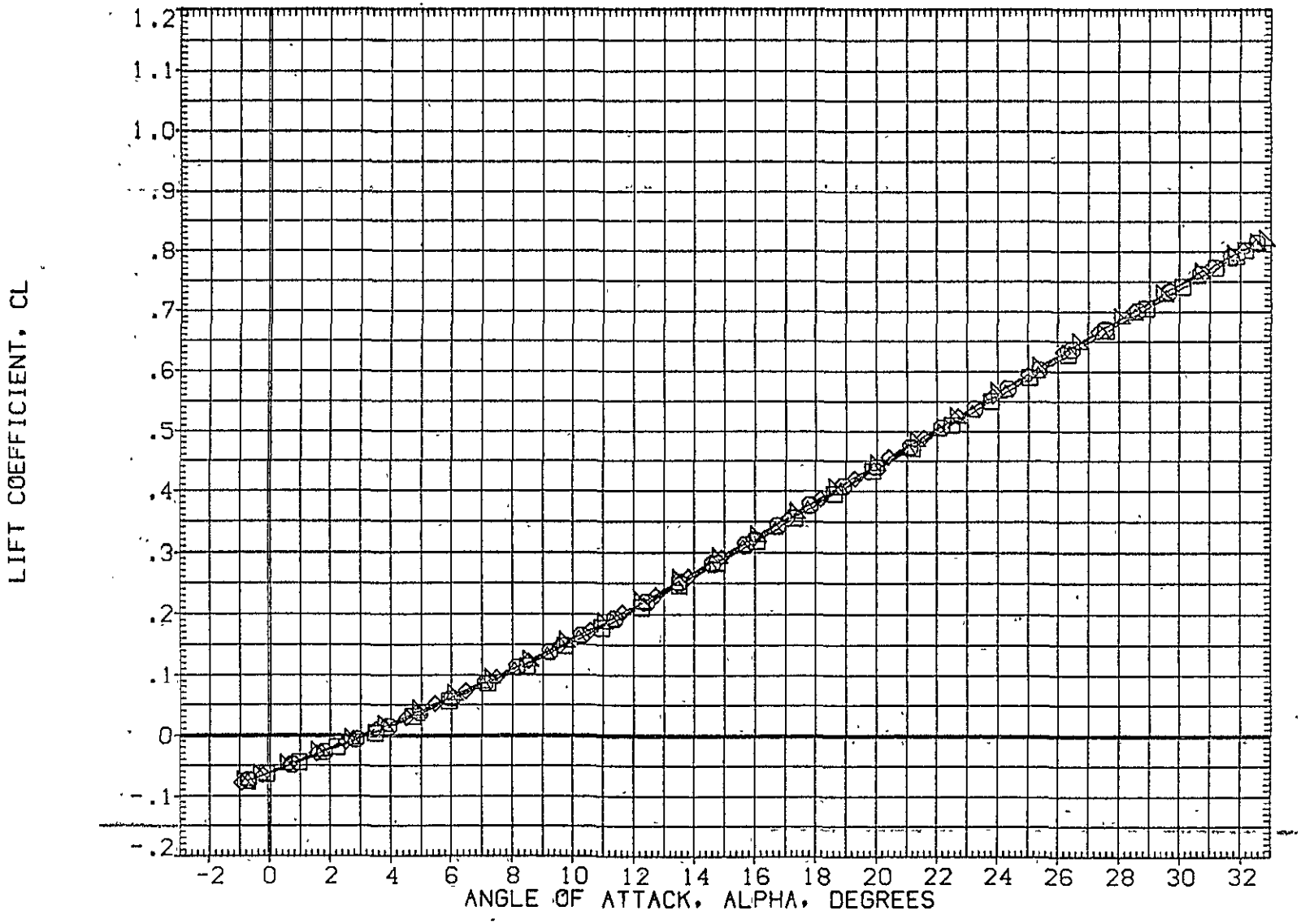


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

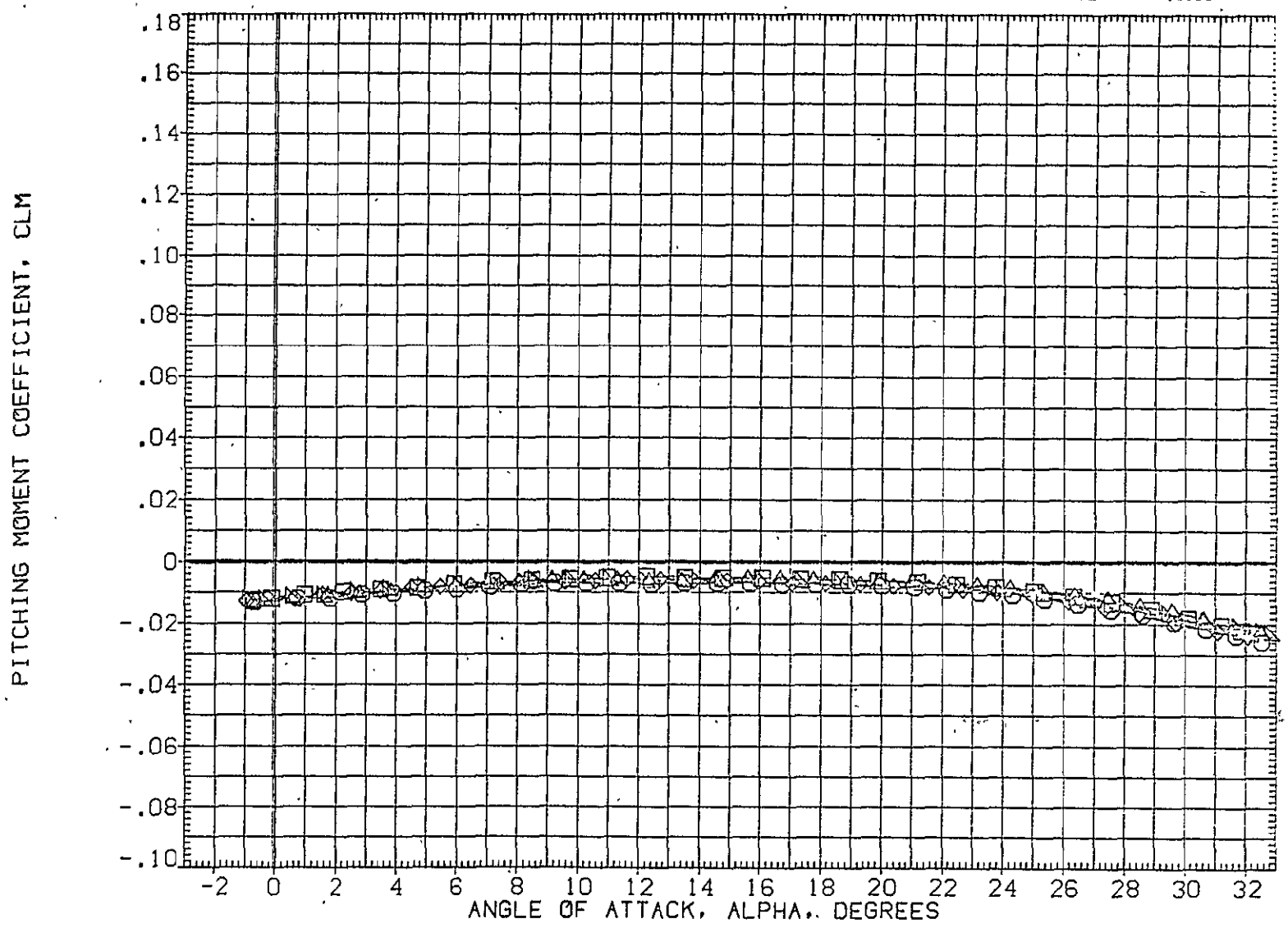


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO15)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	1.000	1.000
(RHYO16)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	3.000	1.000
(RHYO17)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	4.000	2.000
(RHYO18)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	6.000	1.000
(RHYO19)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2890.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

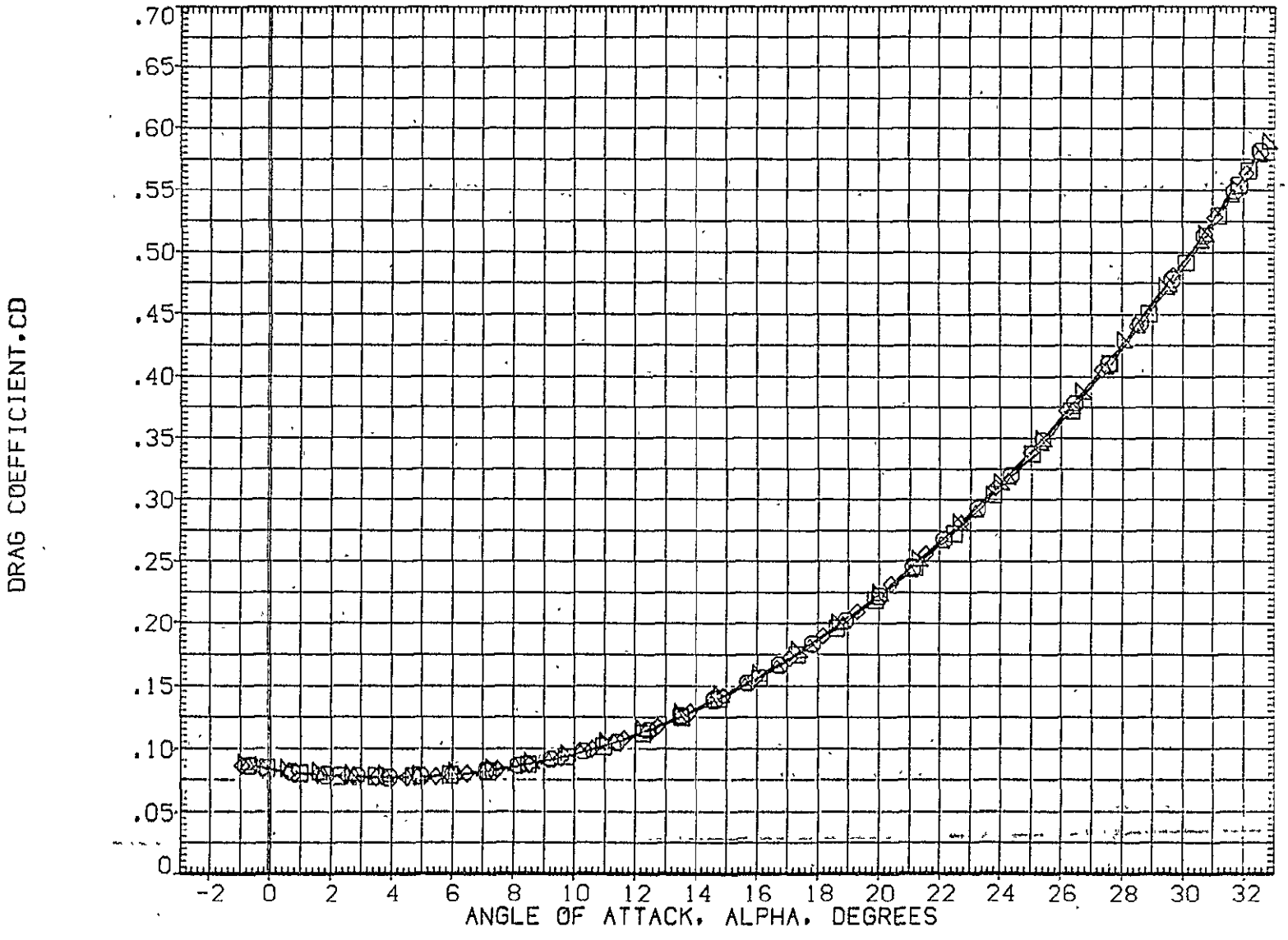


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

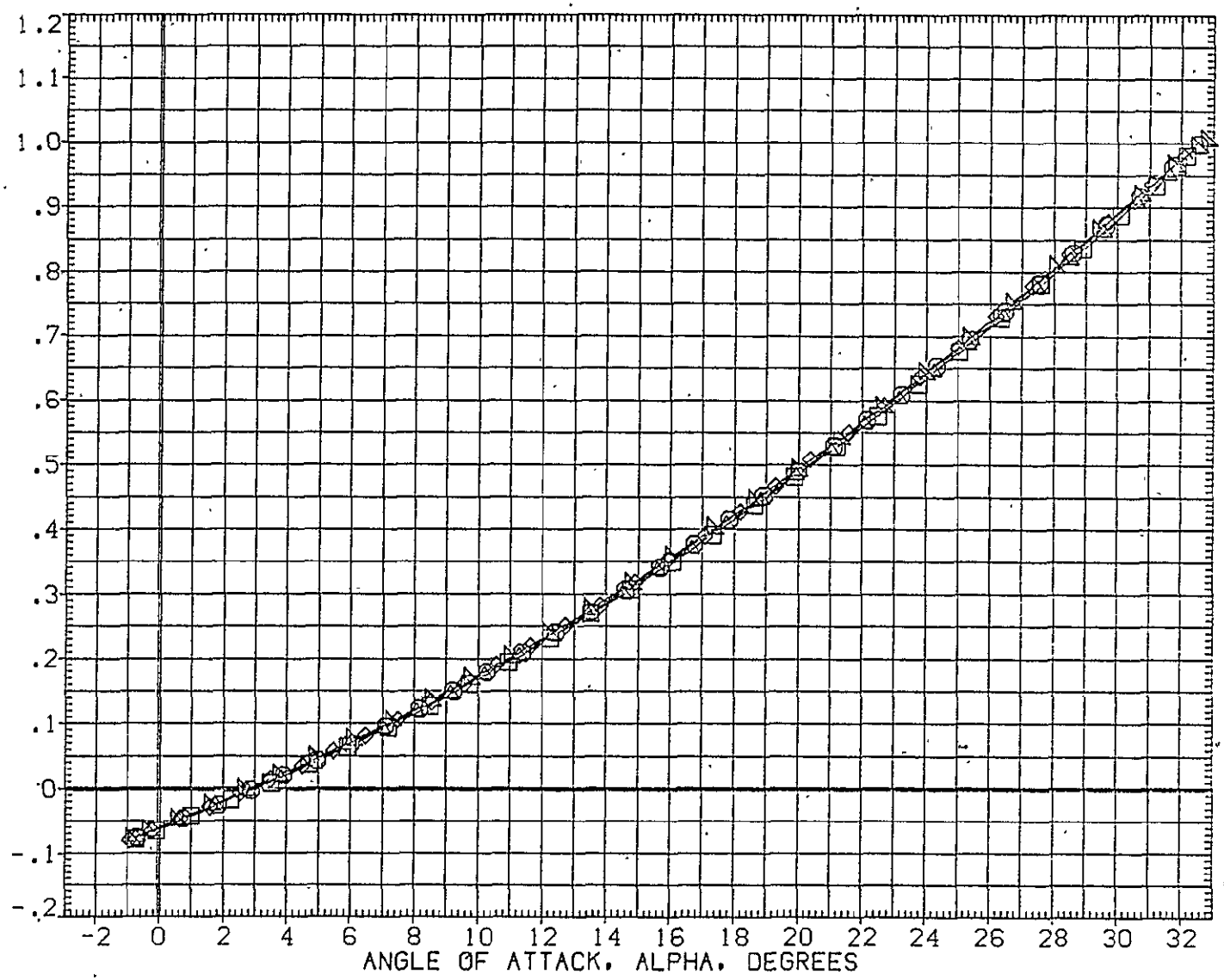


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

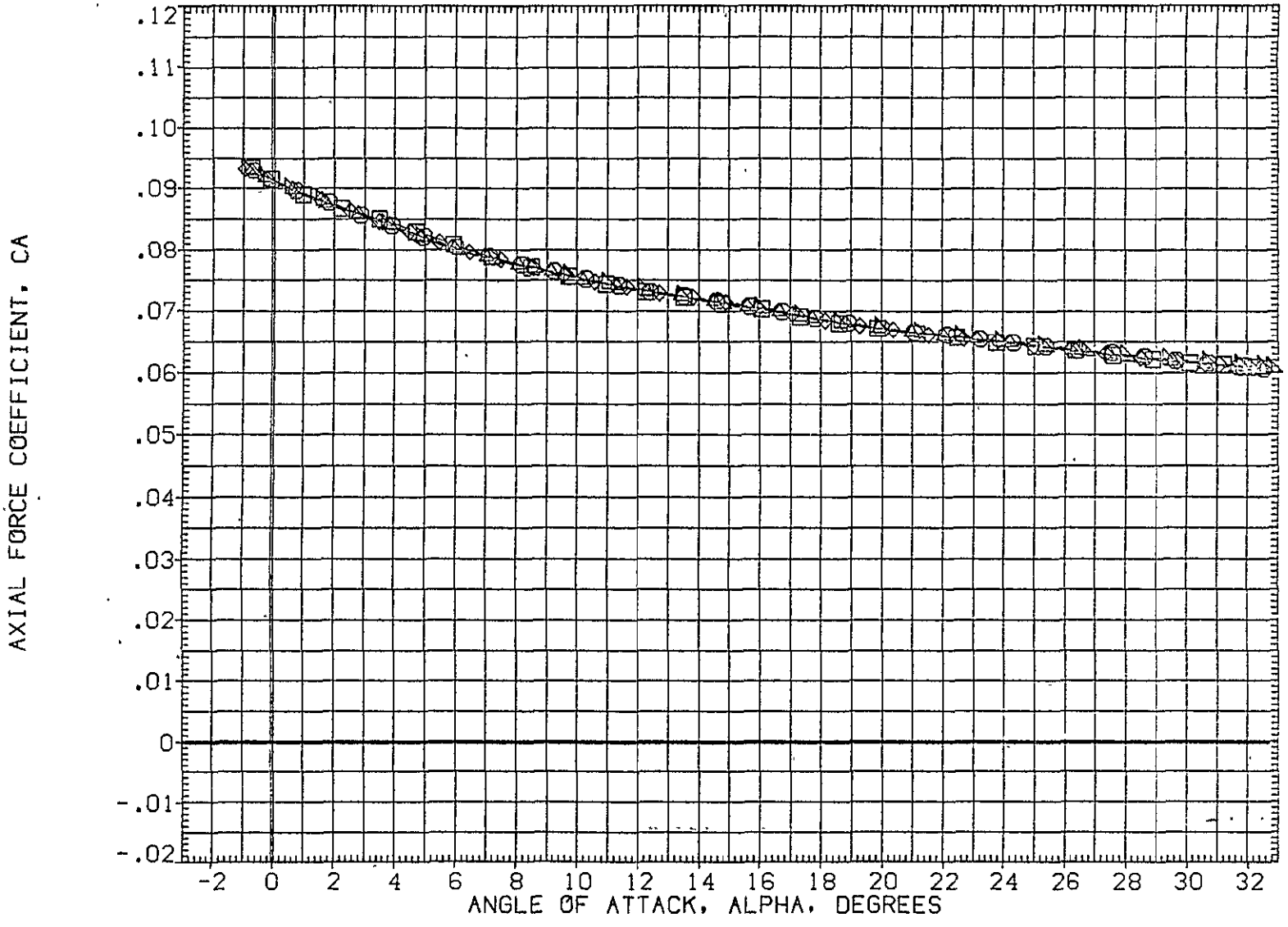


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	◺	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

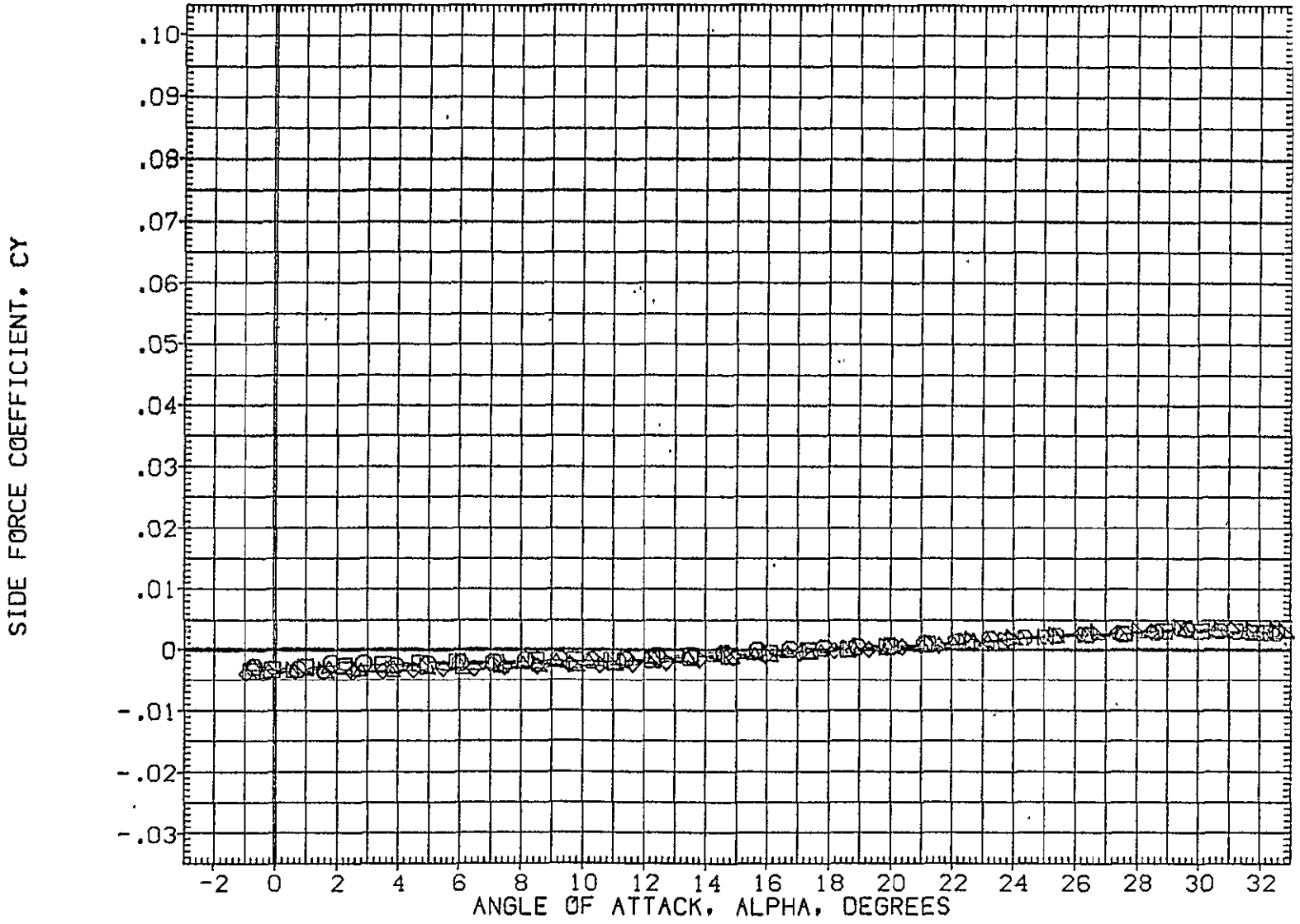


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	[illegible]	1.000
(RHY017)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	⊲	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)	⊳	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

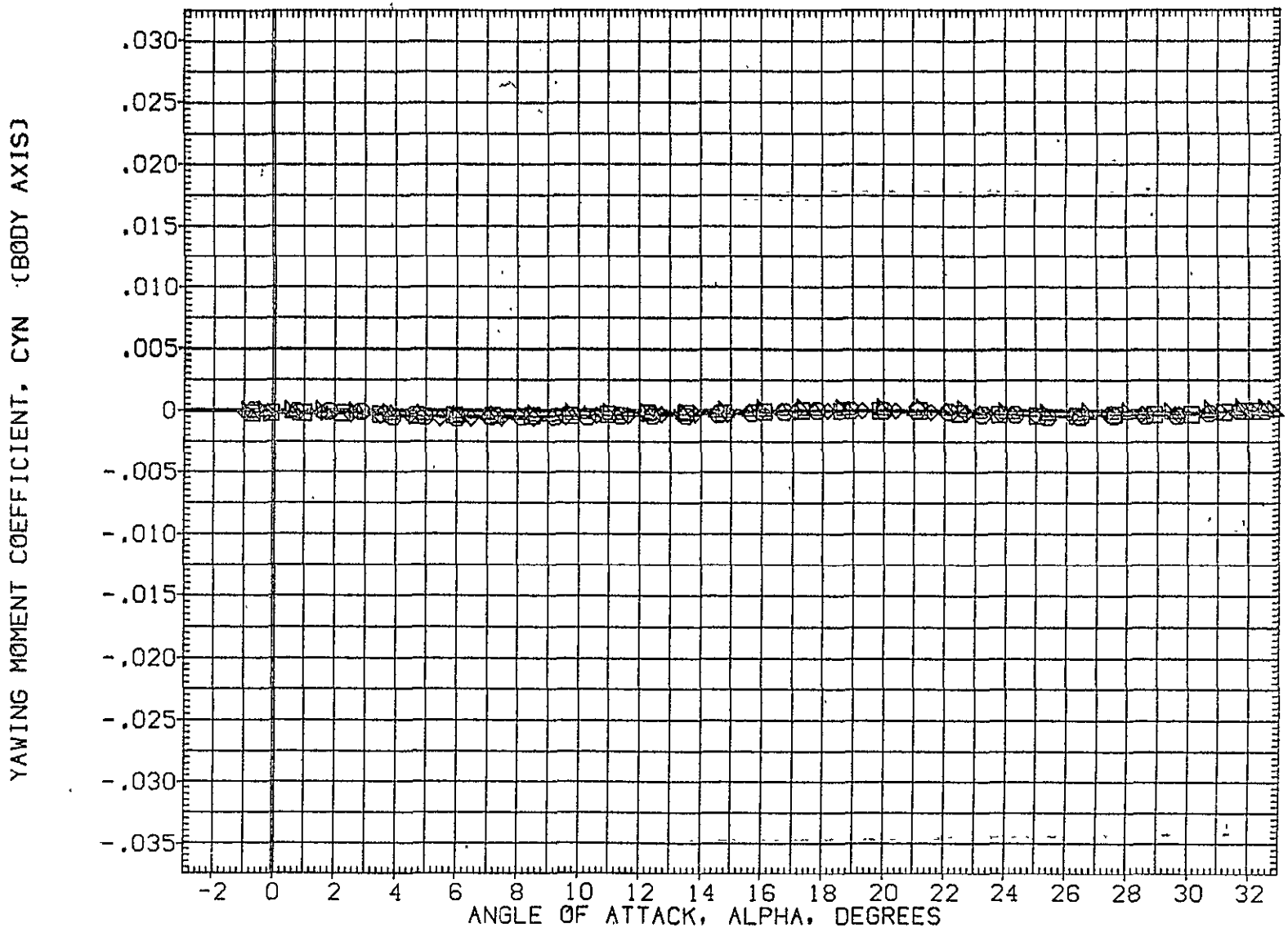


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)	◁	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

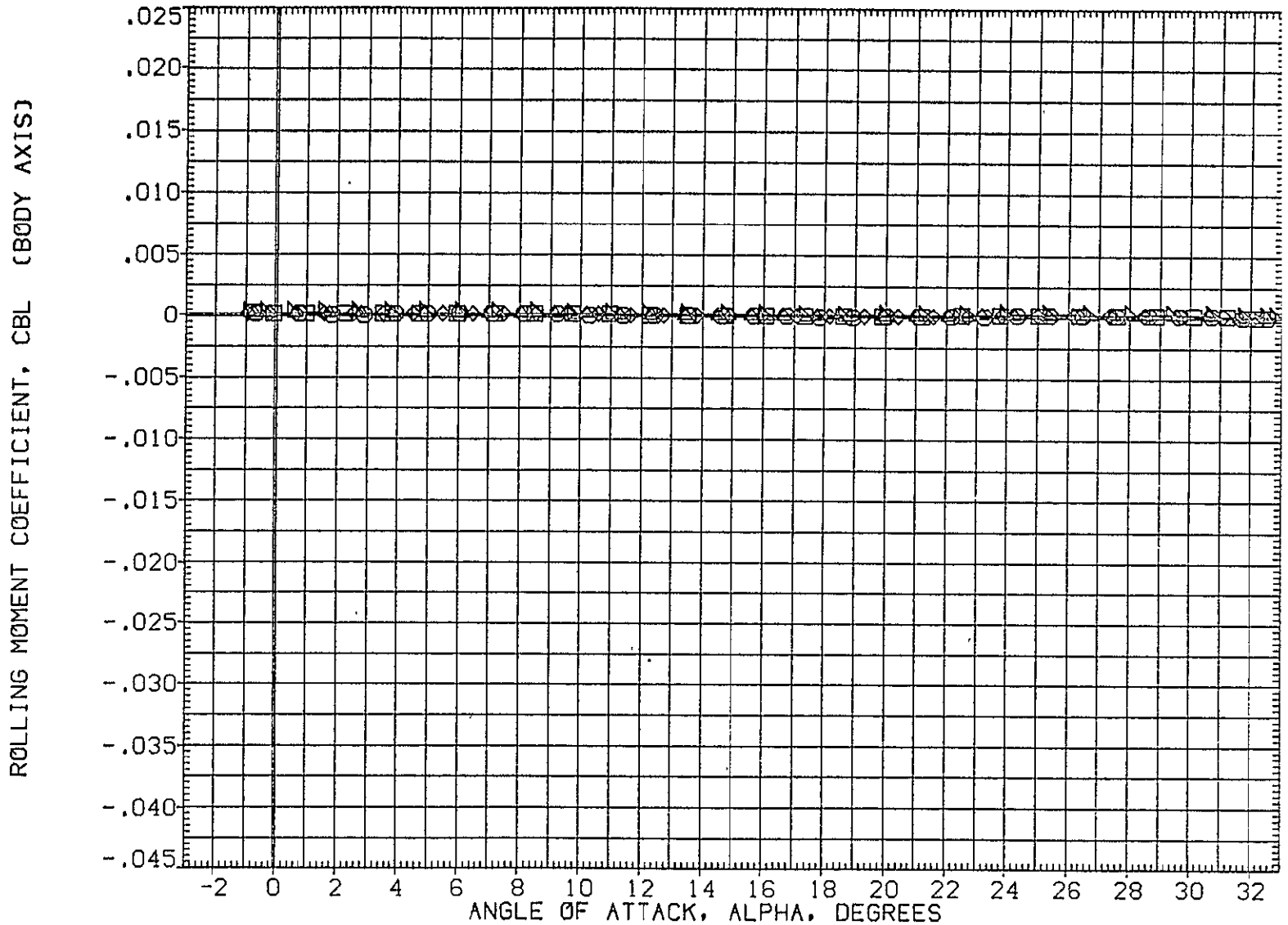


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY016)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	3.000	1.000
(RHY017)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	4.000	2.000
(RHY018)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	6.000	1.000
(RHY019)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

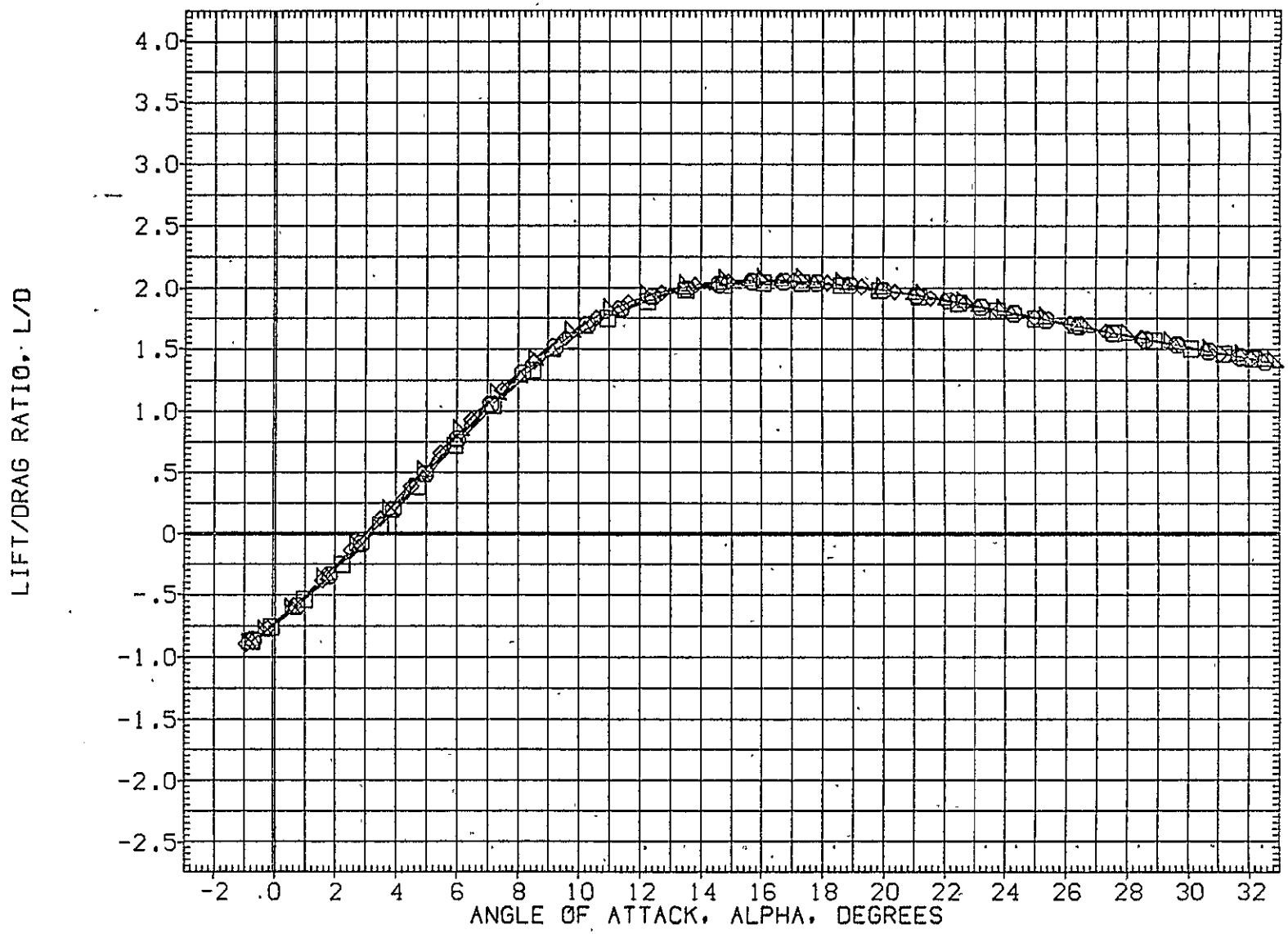


FIG 15 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= 0

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

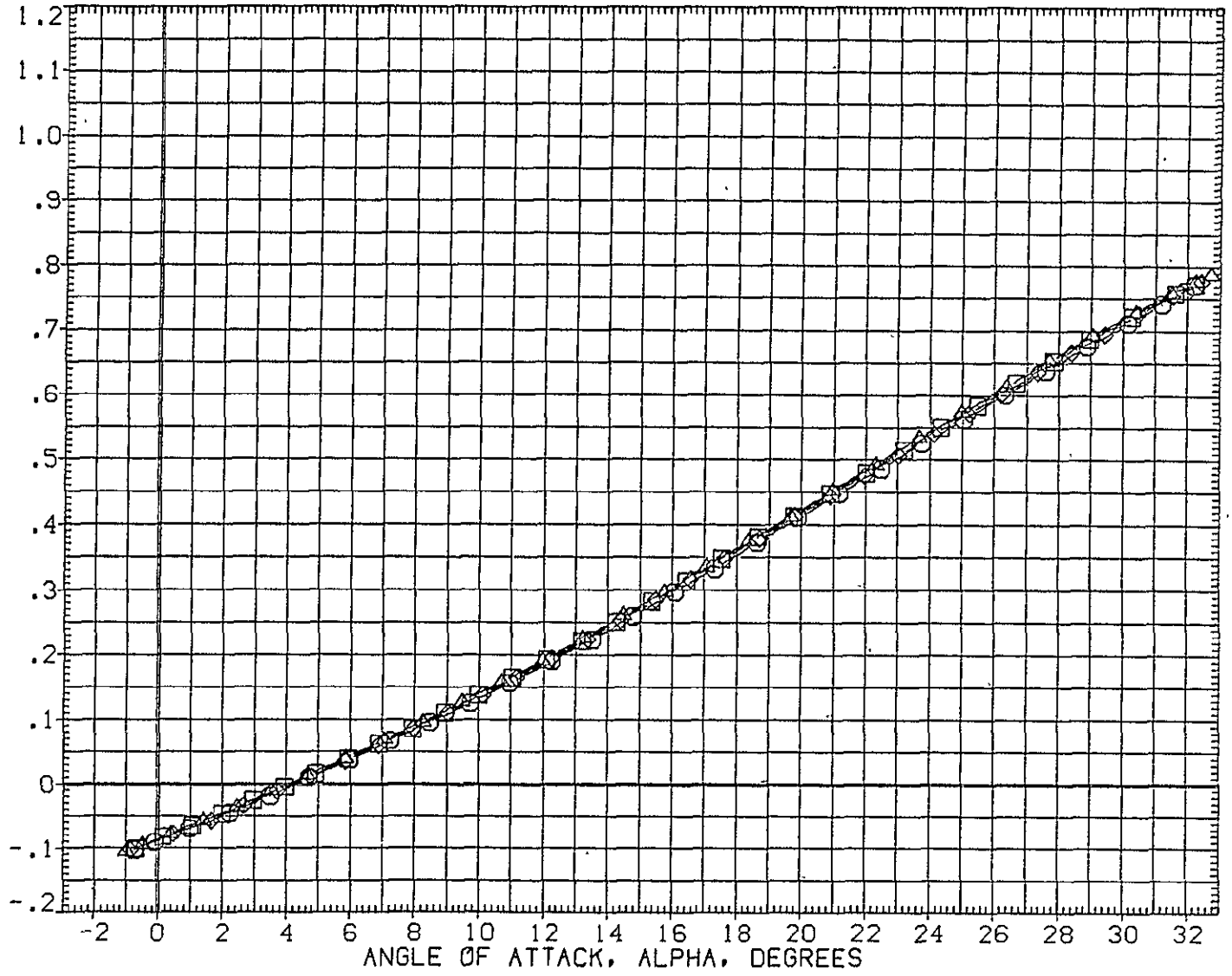


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

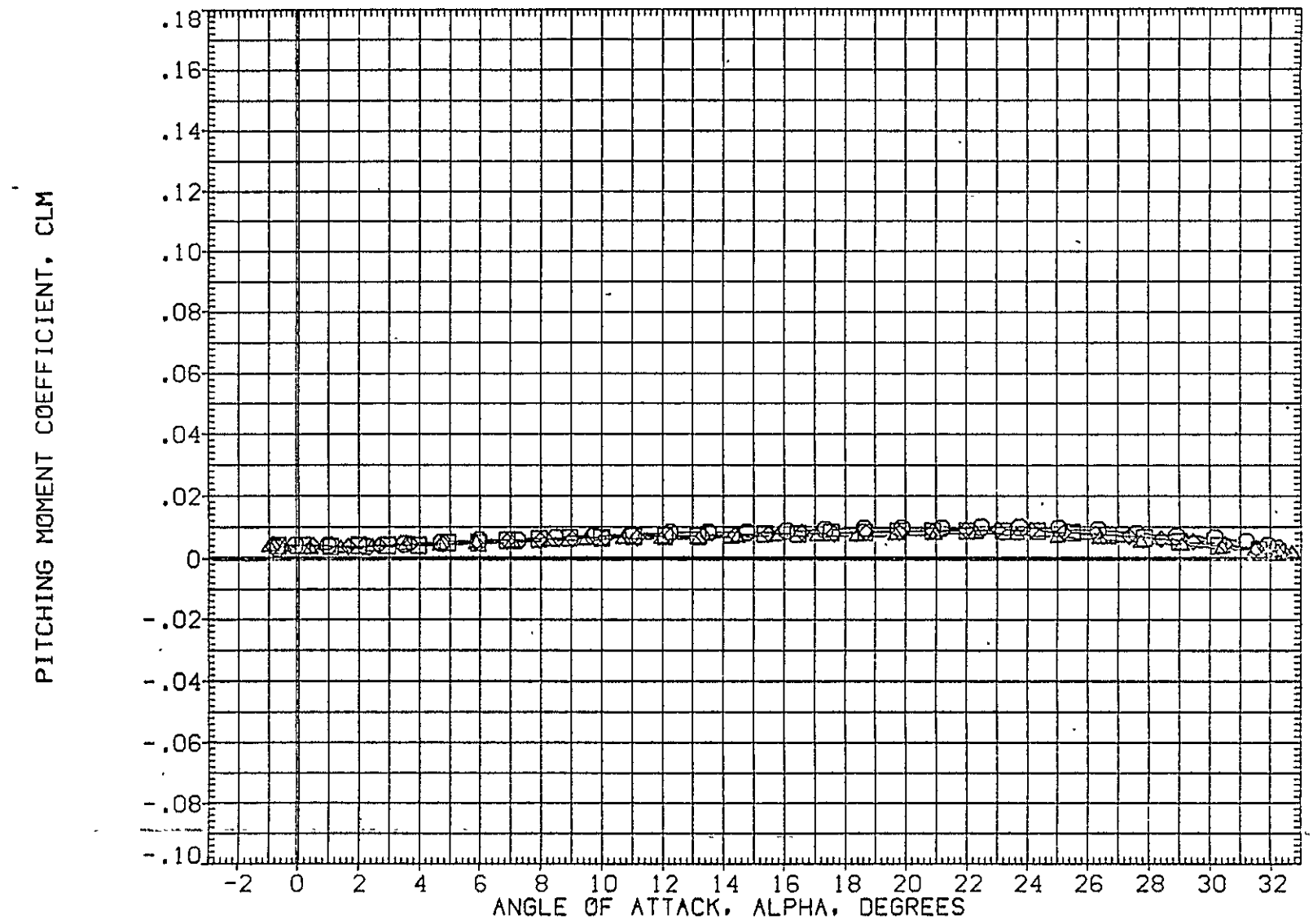


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

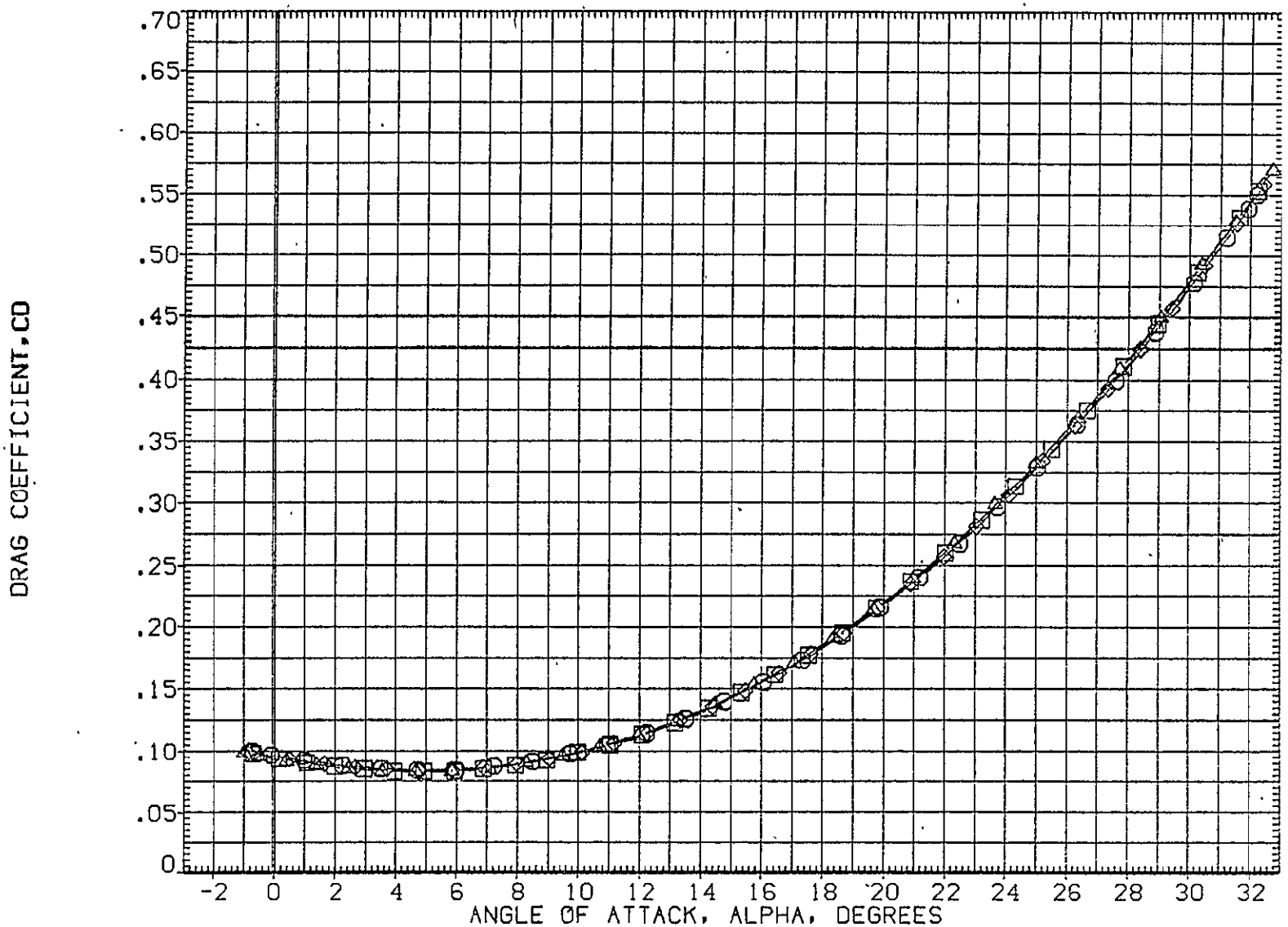


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

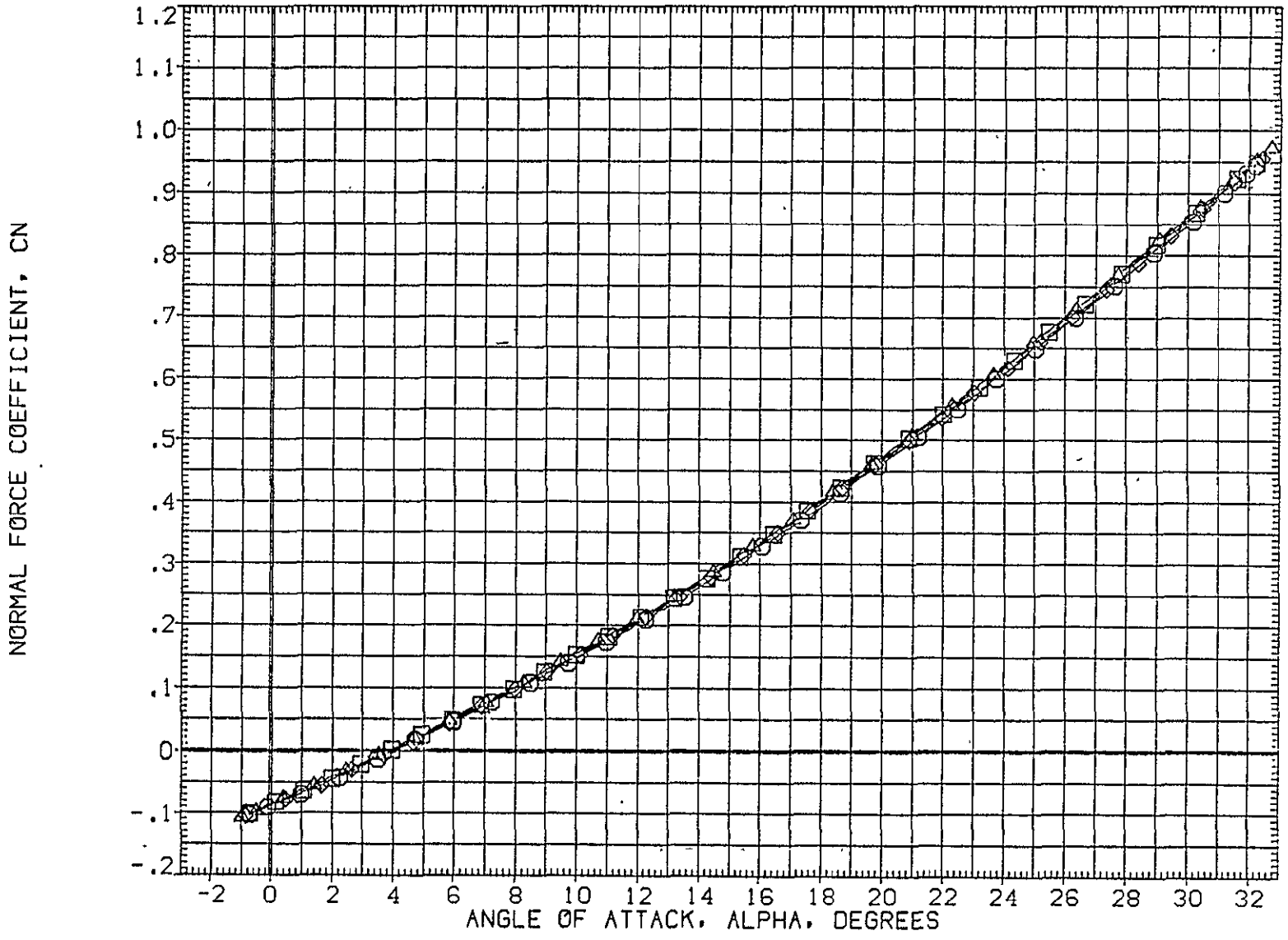


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO45)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	3.000	1.000
(RHYO46)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	4.000	2.000
(RHYO47)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	6.000	1.000
(RHYO48)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ
LREF	474.8100	IN(
BREF	936.6800	IN(
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

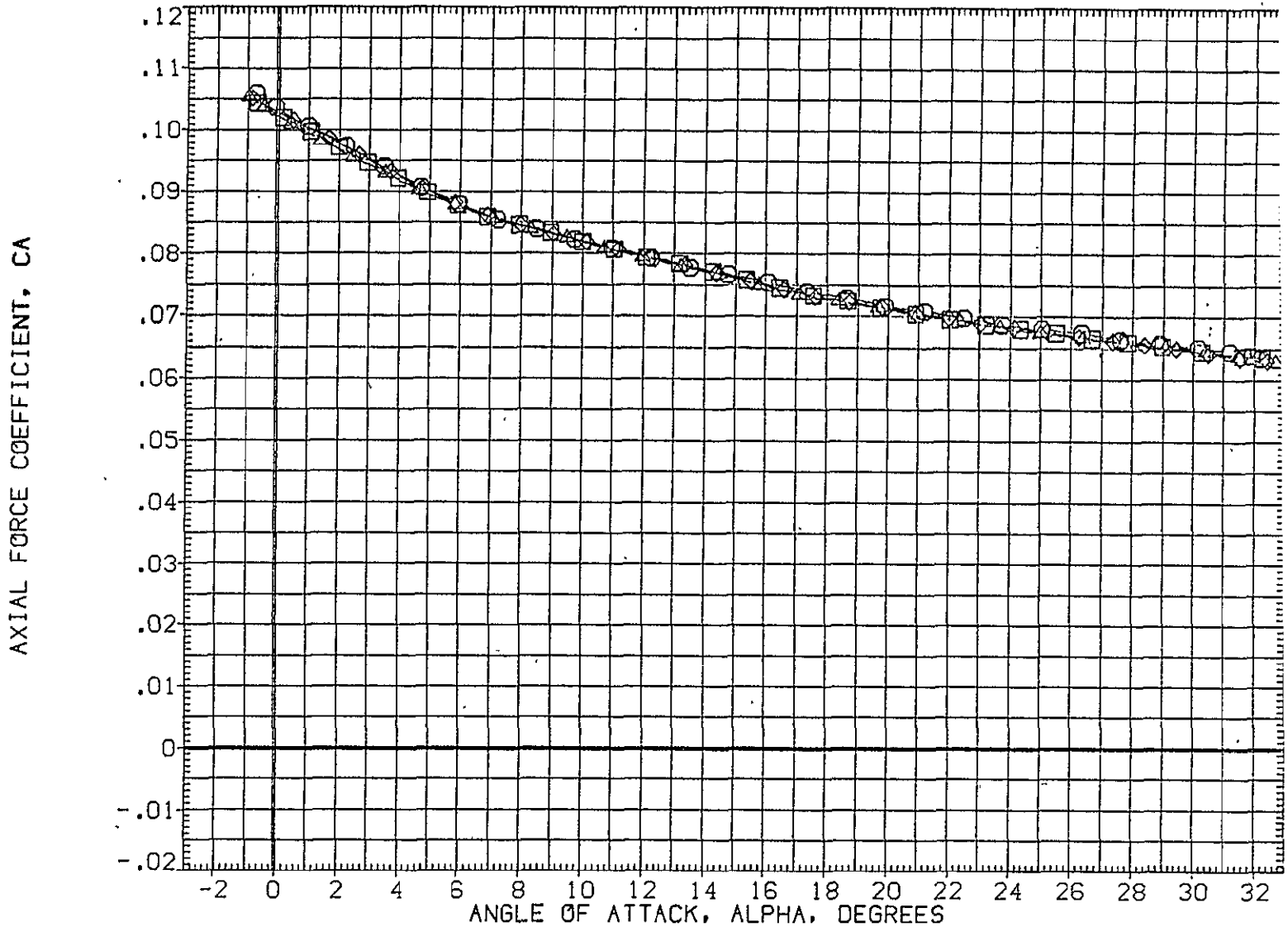


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

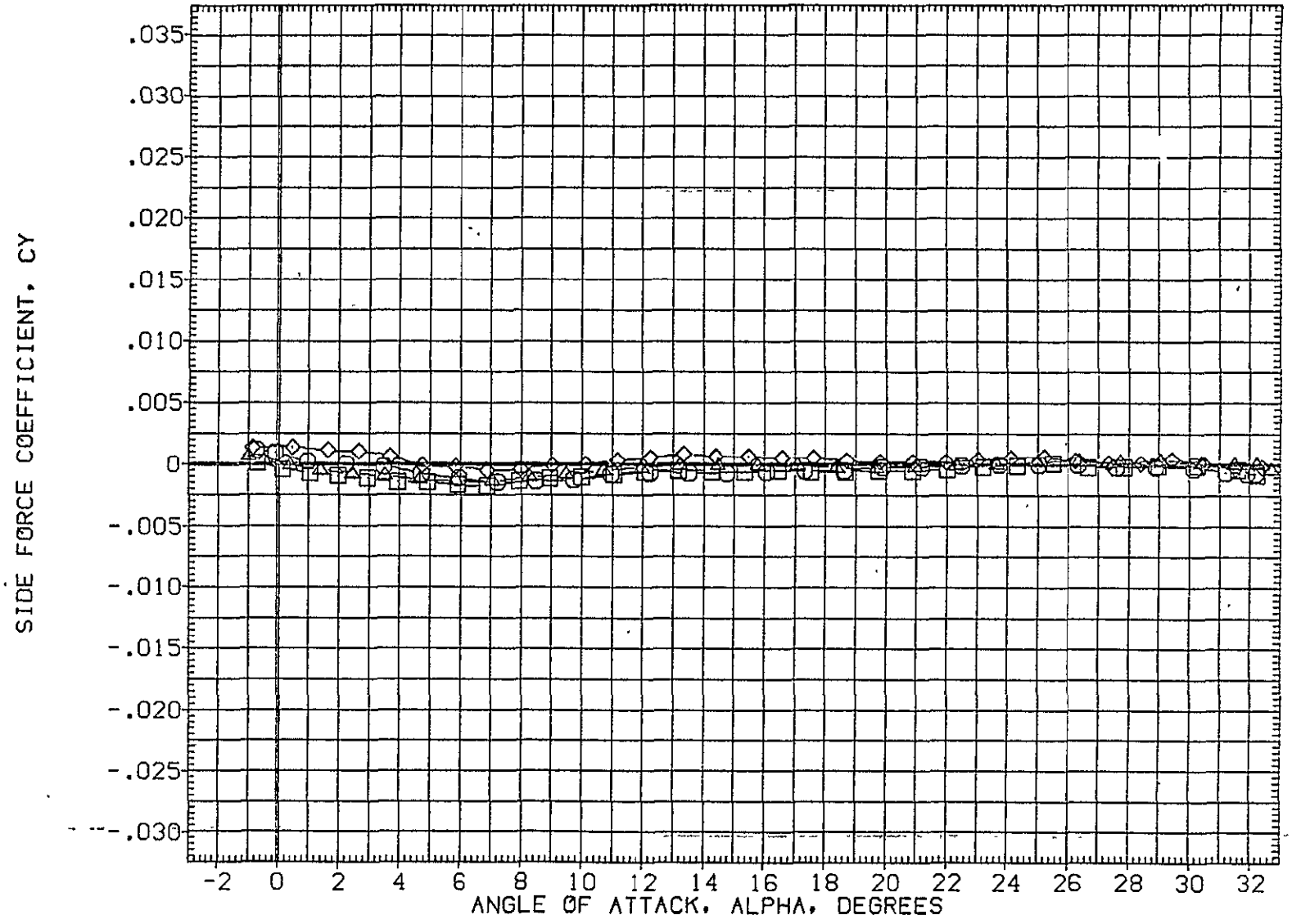


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

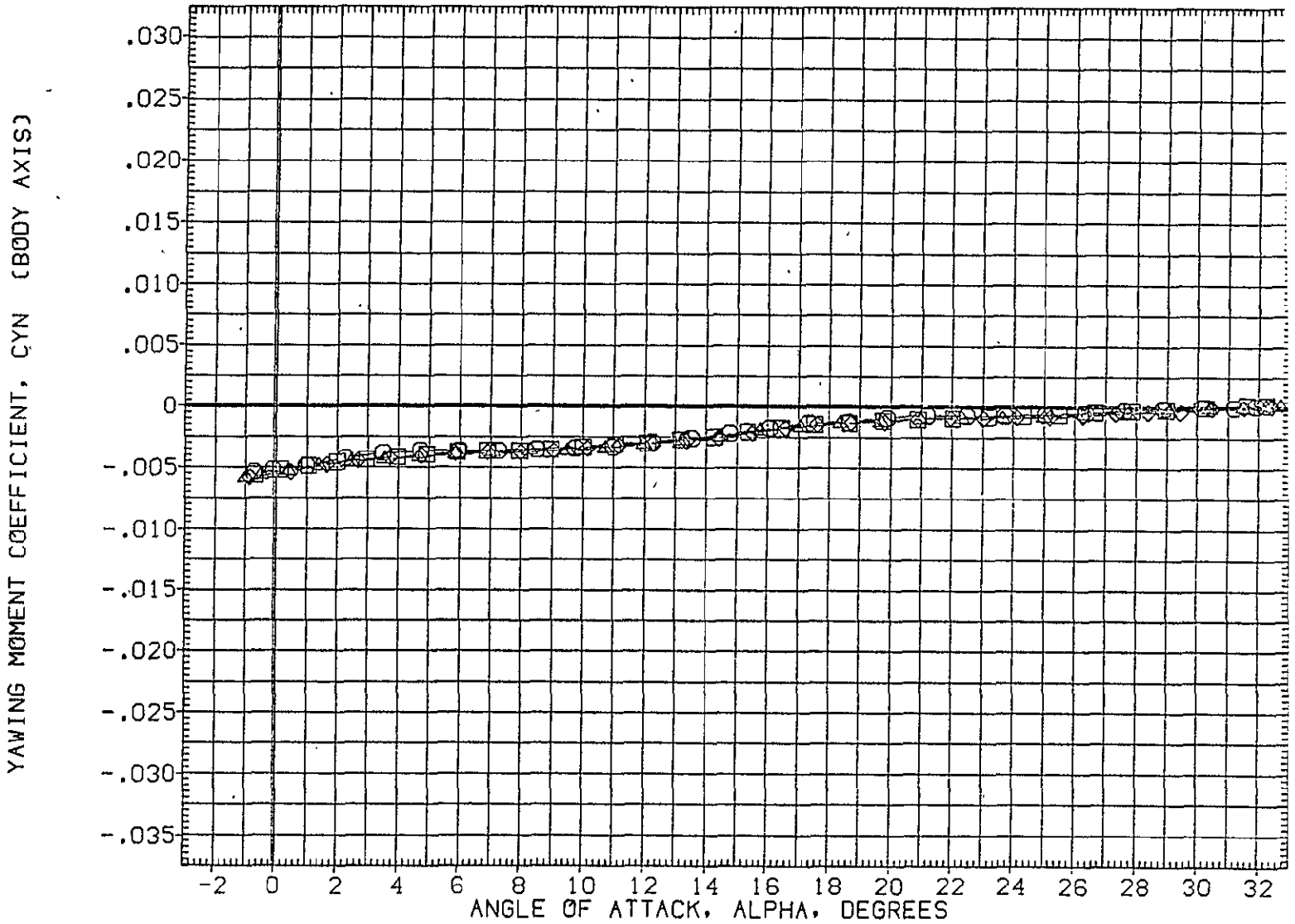


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

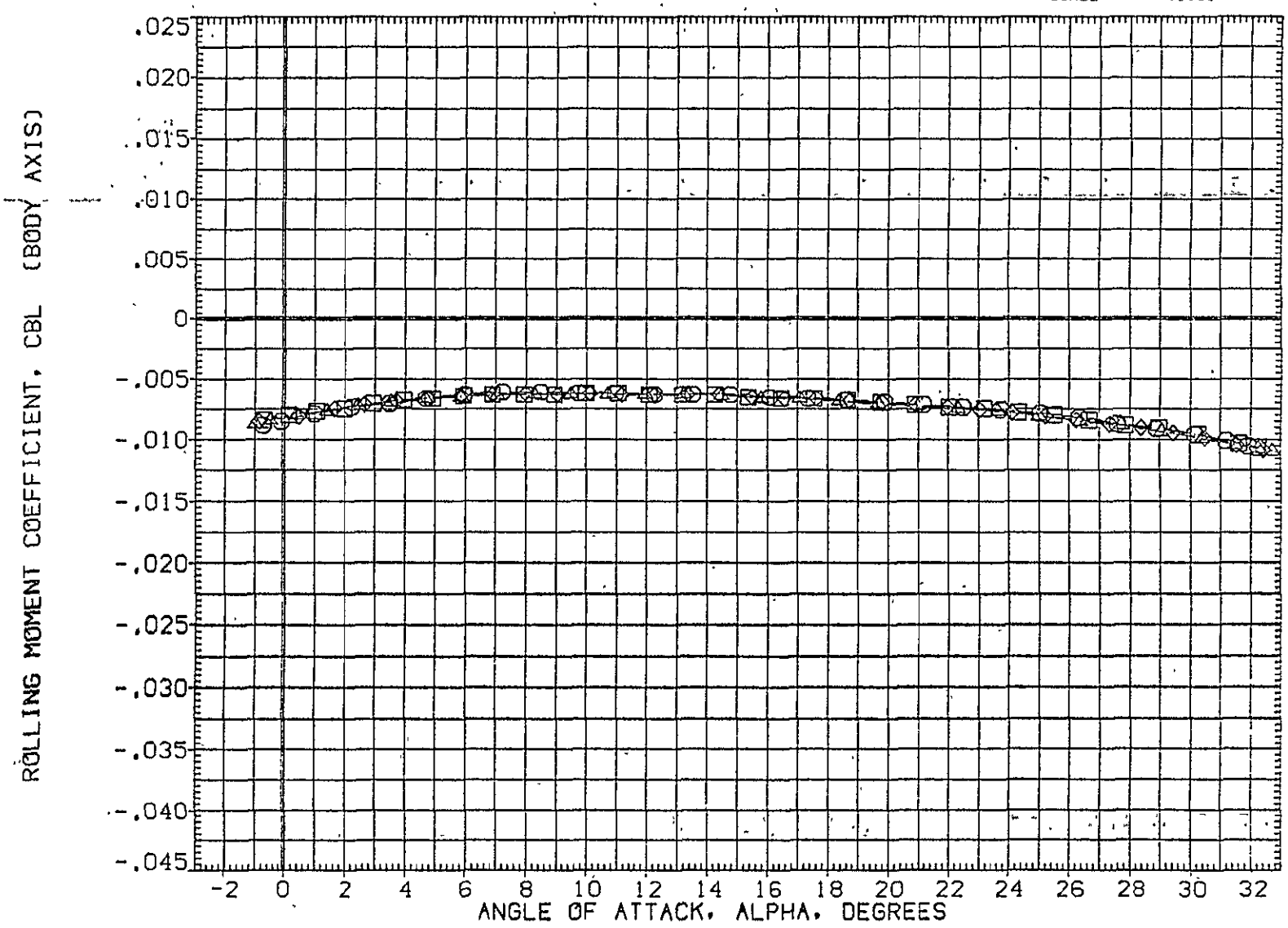


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY045)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	3.000	1.000
(RHY046)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	4.000	2.000
(RHY047)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	6.000	1.000
(RHY048)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

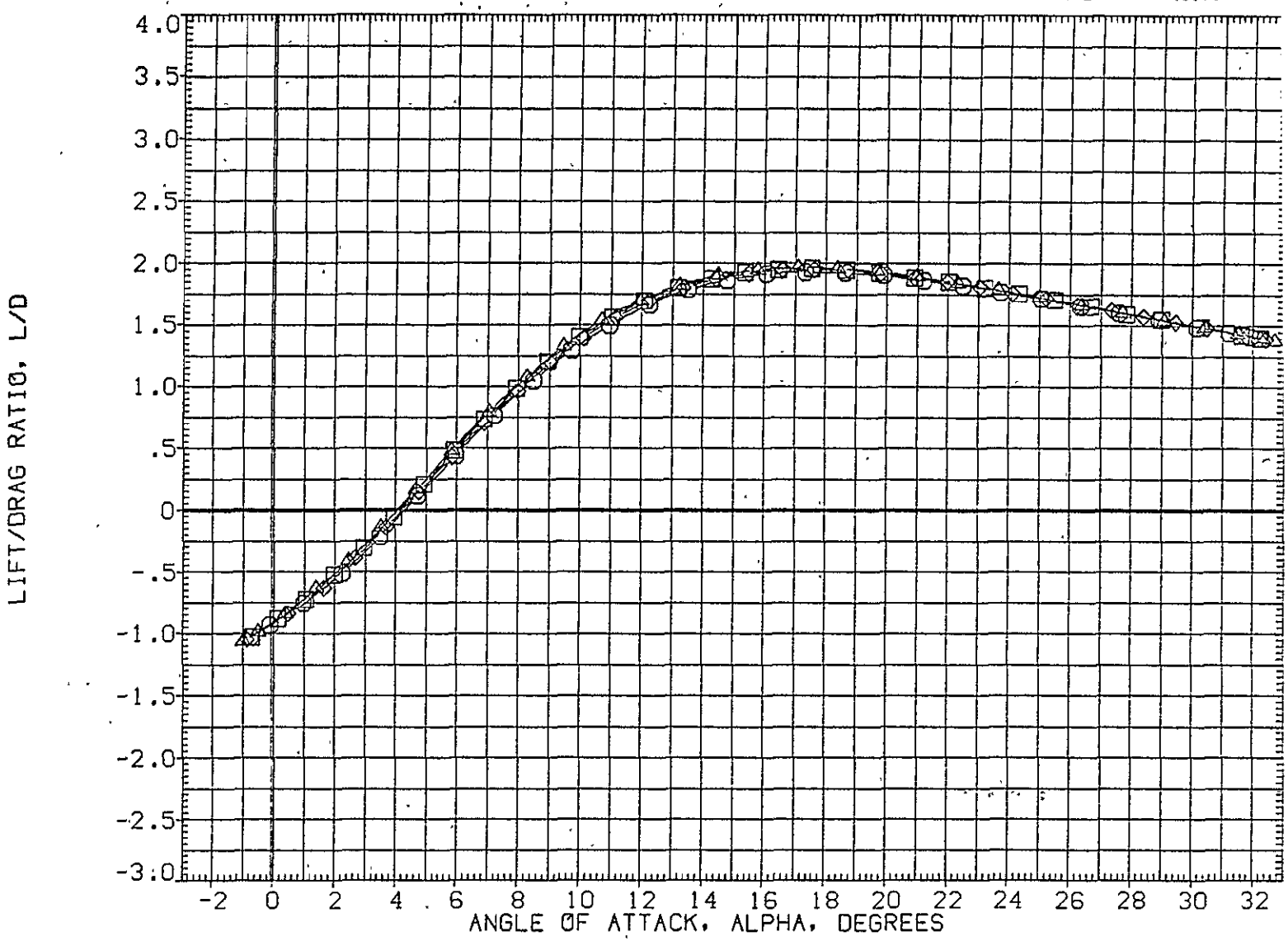


FIG 16 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

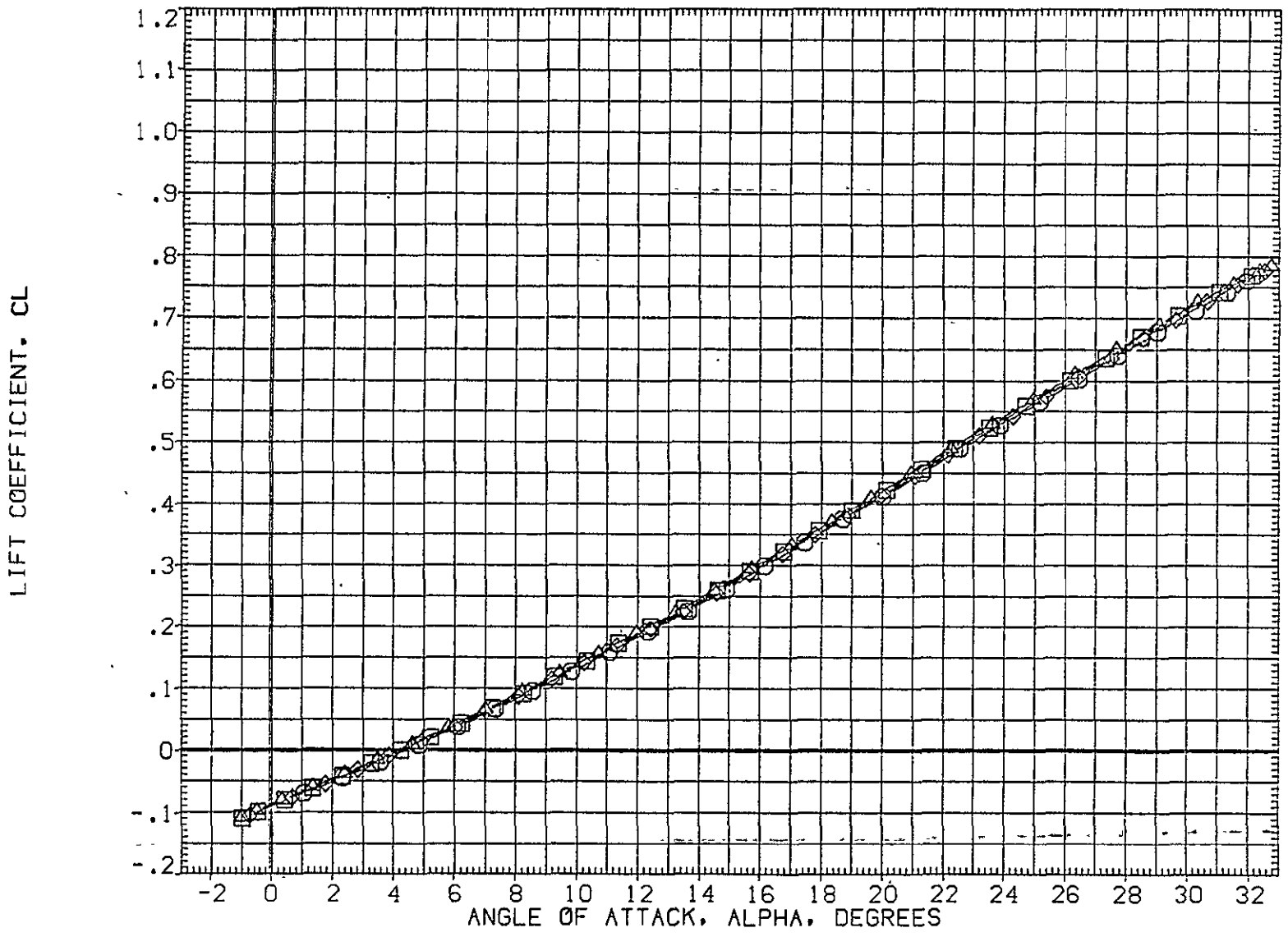


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

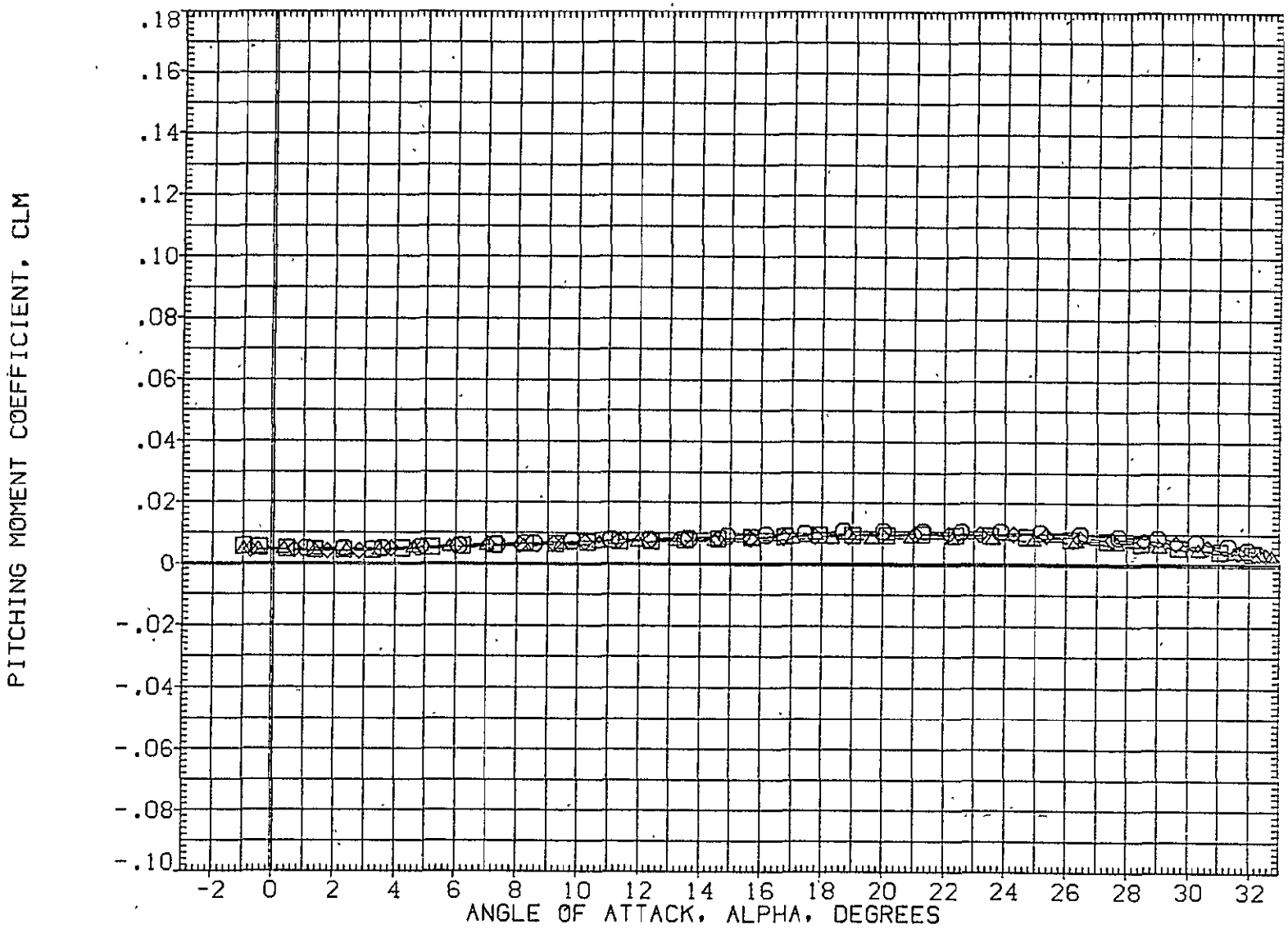


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	▽	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

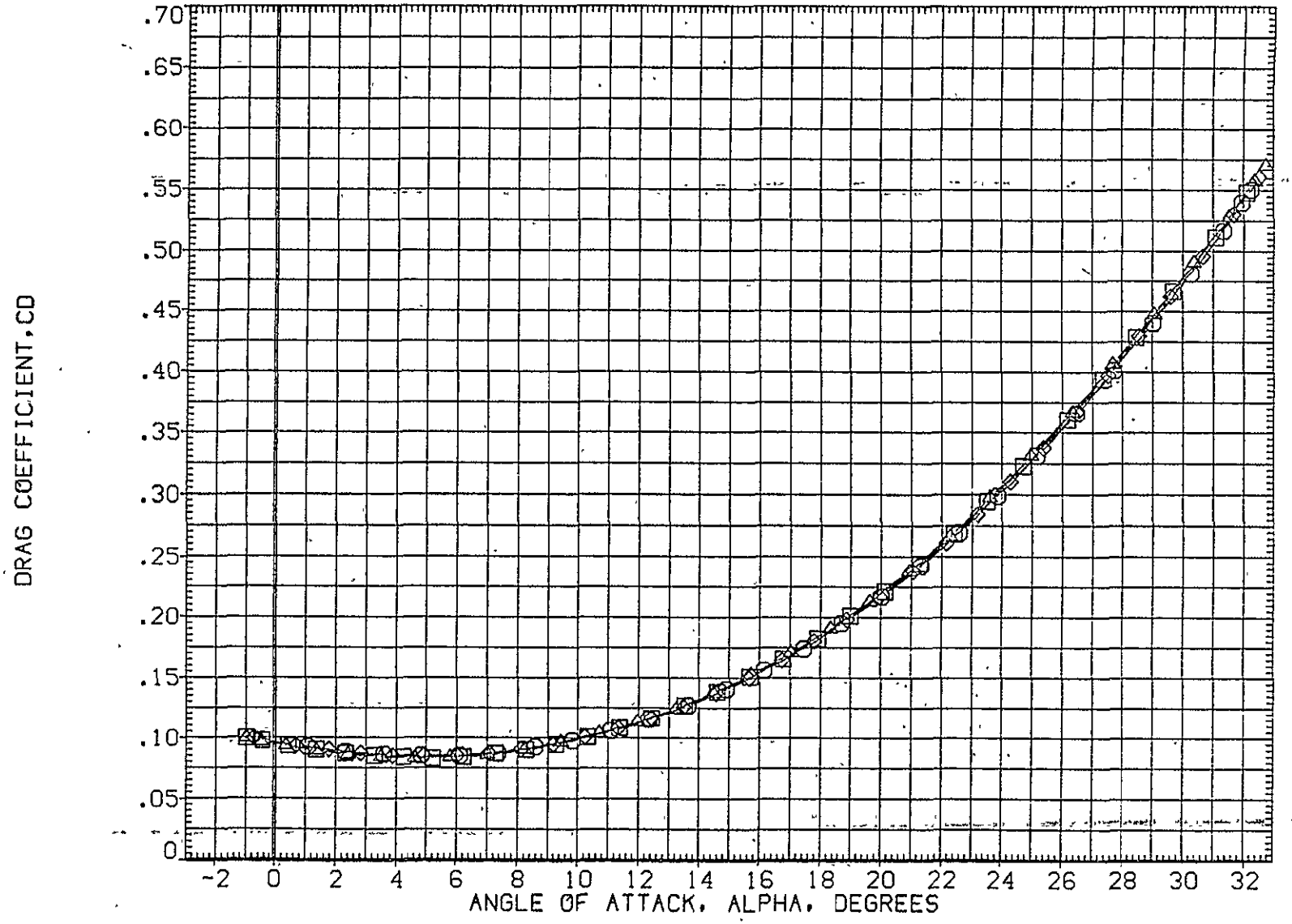
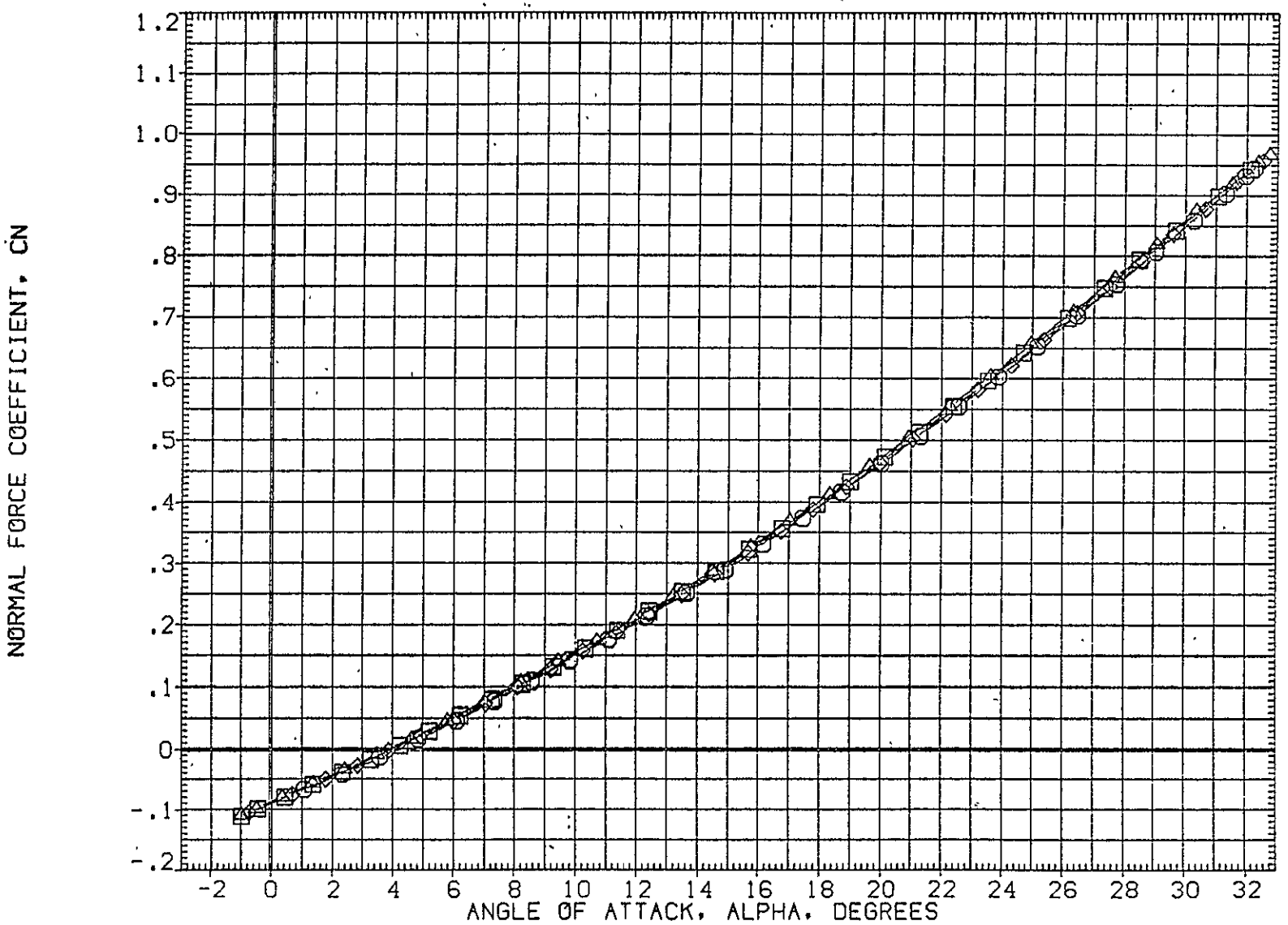


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ELEVON	AILRON	A-RATE	A-SCHD
(RHYO31)	□	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHYO32)	□	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHYO33)	◇	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHYO34)	△	LTV-44-512 (LA-58)	ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

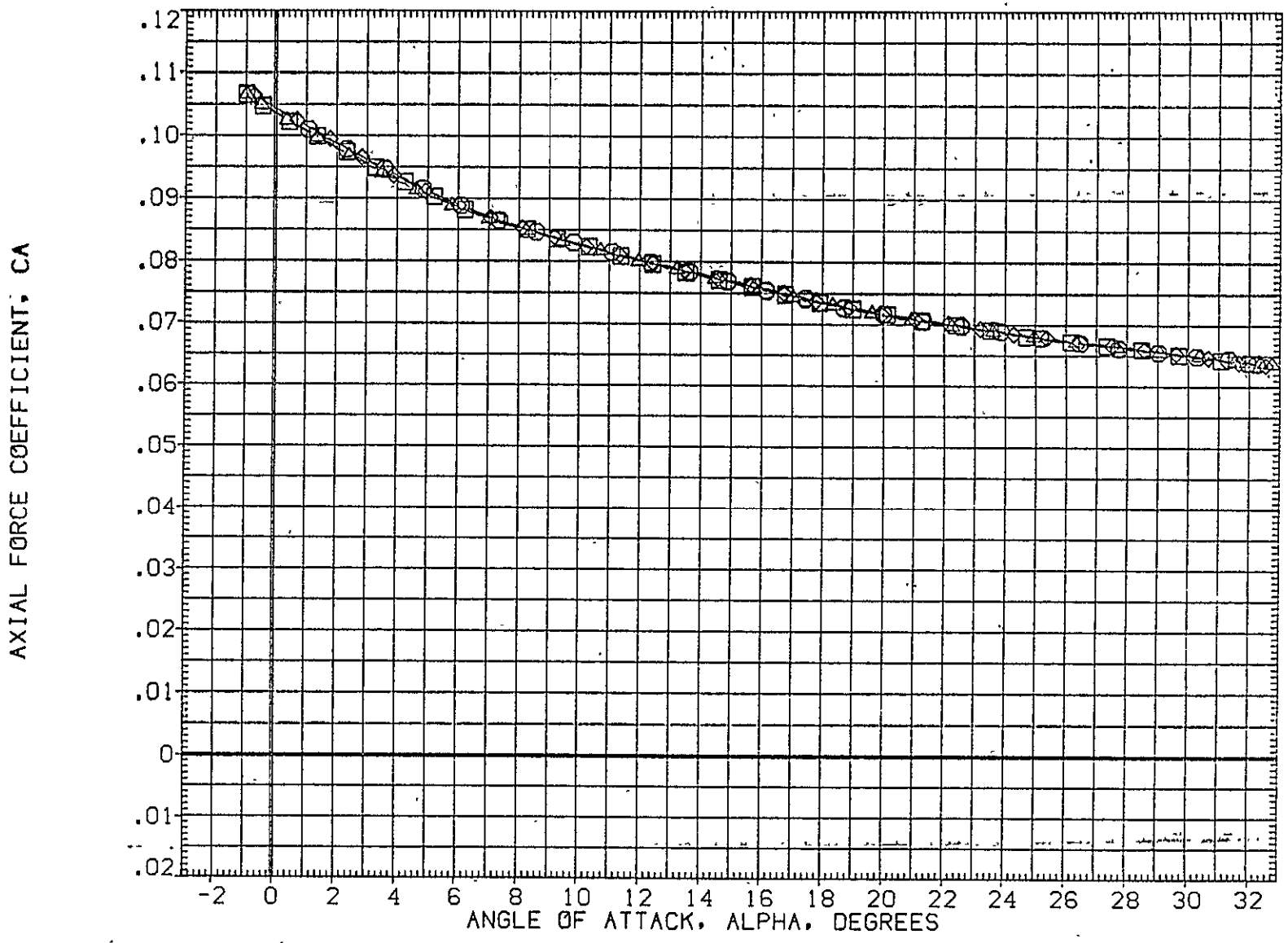


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	⊡	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

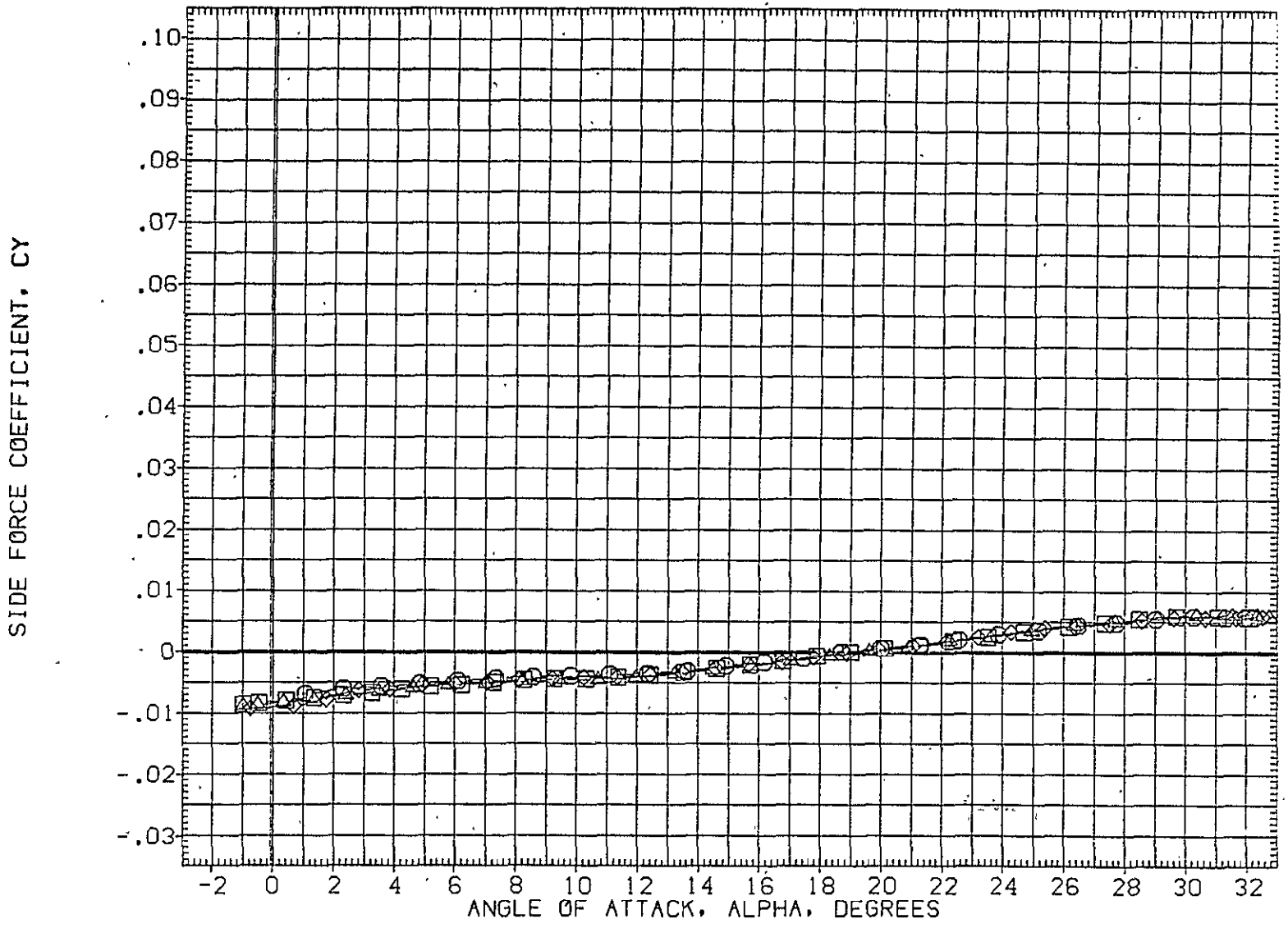


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	3.000	1.000
(RHY032)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	4.000	2.000
(RHY033)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	6.000	1.000
(RHY034)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

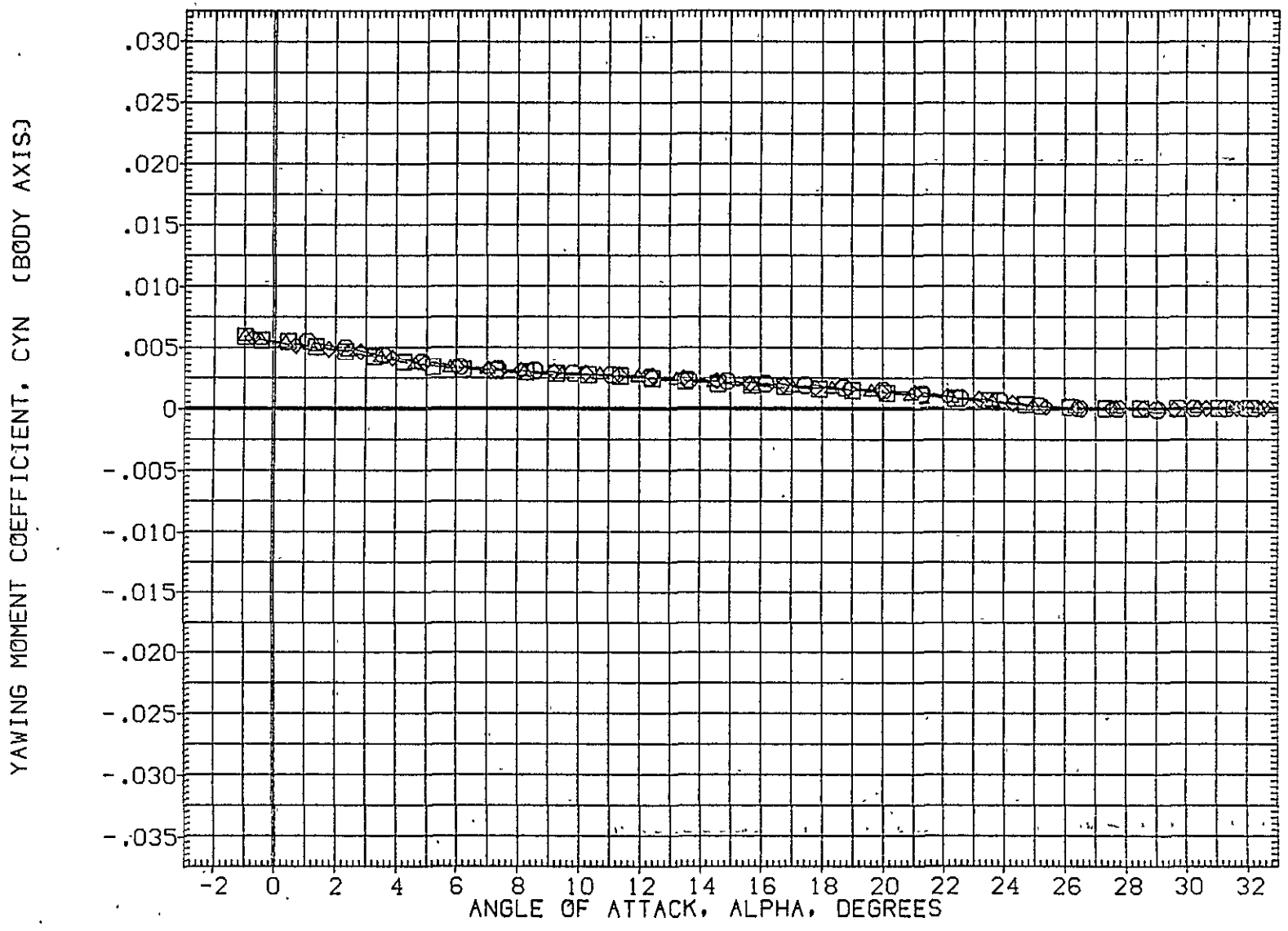


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY031)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	3.000	1.000
(RHY032)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	4.000	2.000
(RHY033)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	6.000	1.000
(RHY034)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATI		
SREF	2690.0000	SC
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

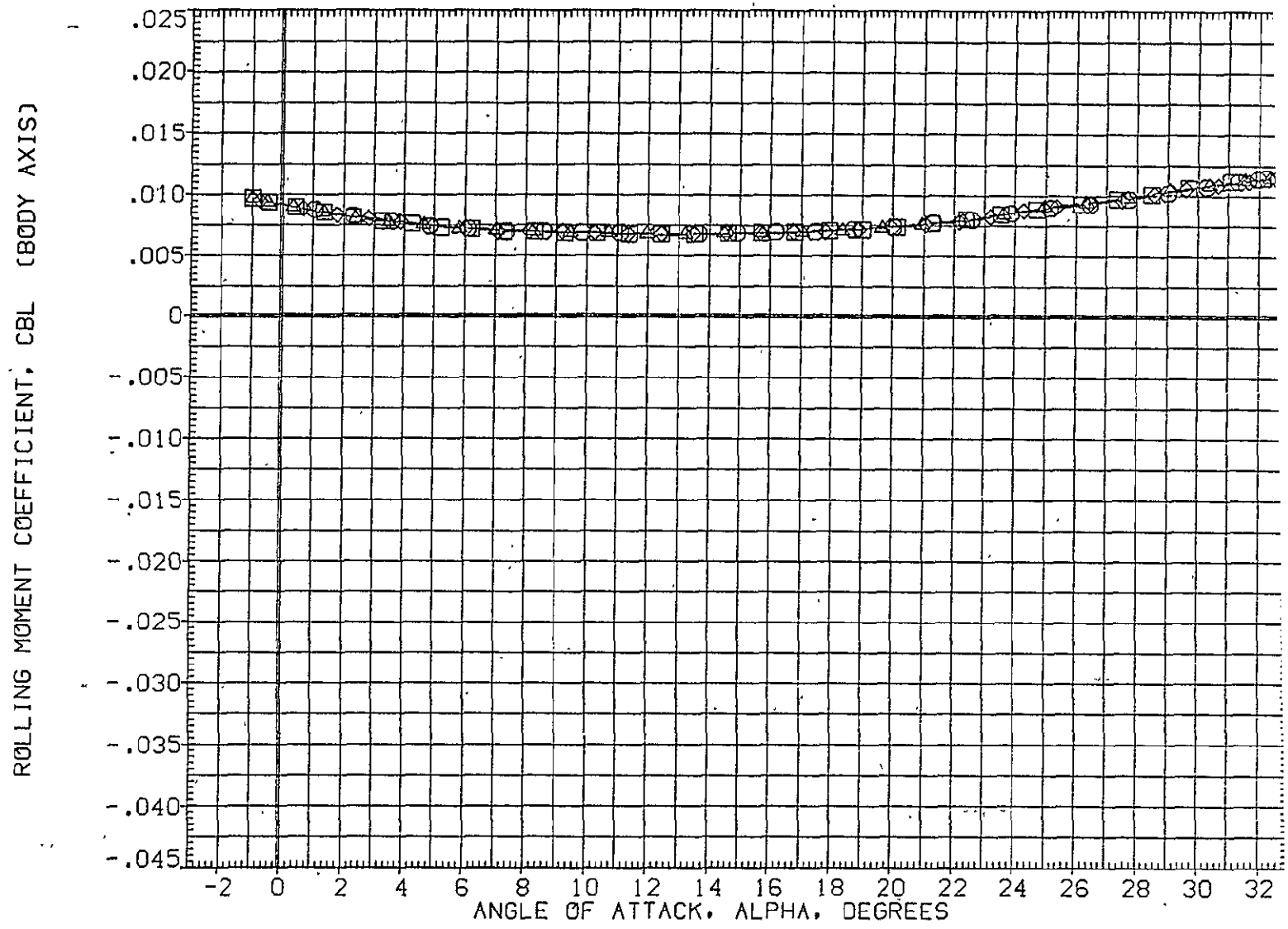


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO31)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	3.000	1.000
(RHYO32)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	4.000	2.000
(RHYO33)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	6.000	1.000
(RHYO34)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

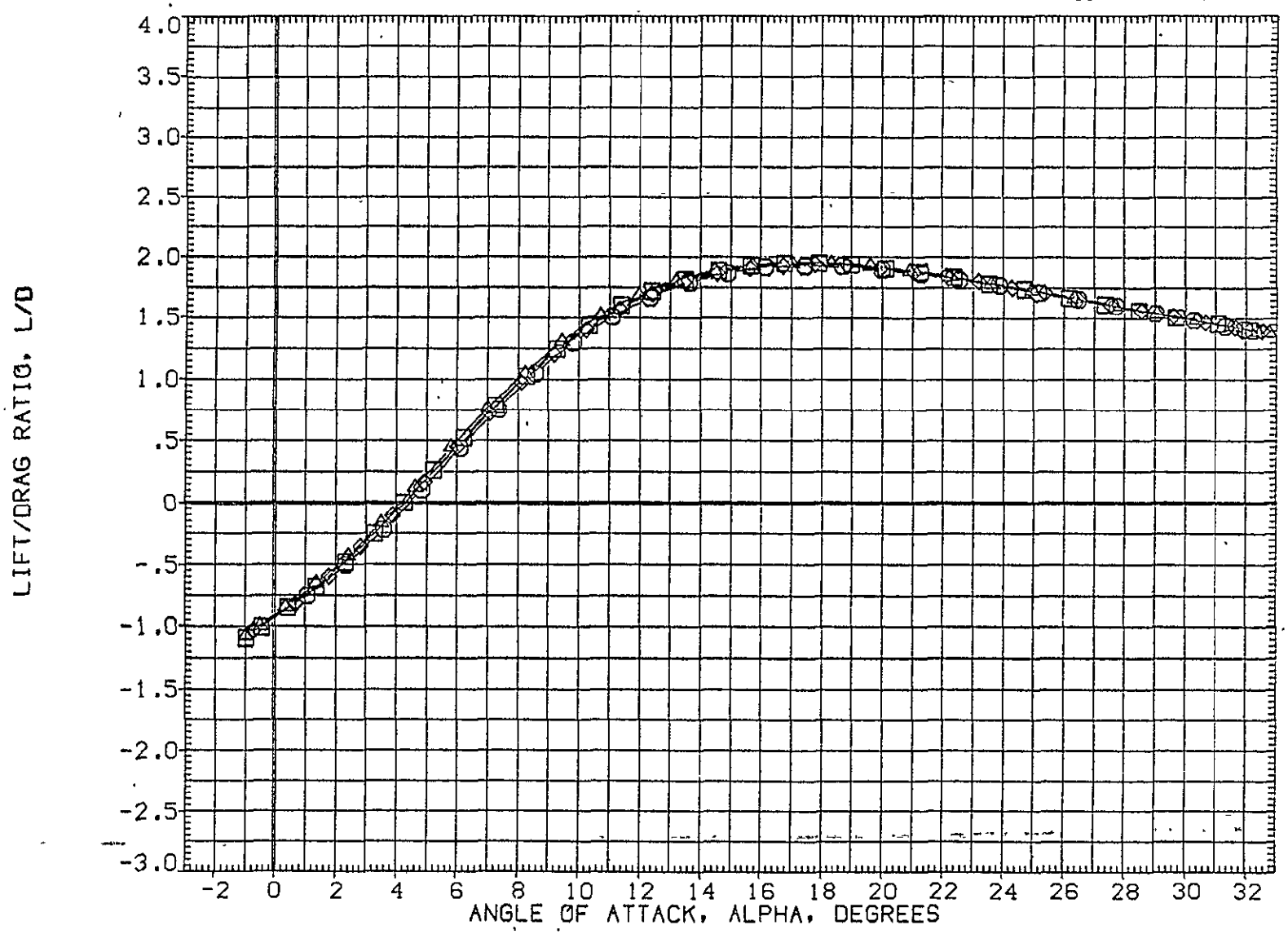


FIG 17 EFFECT OF ALPHA RATE AND DIRECTION(NO GRIT) ELEVON= -20

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

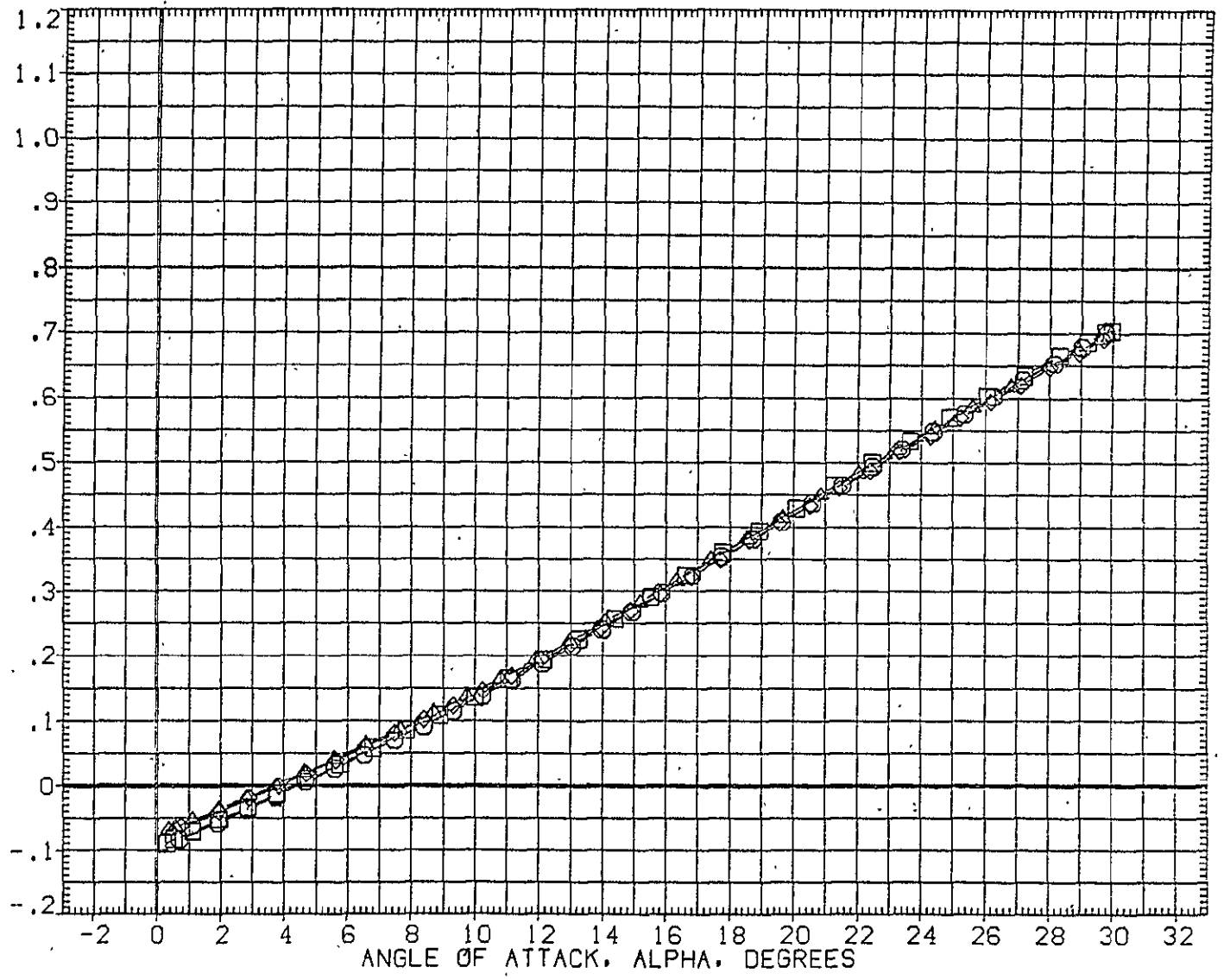


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

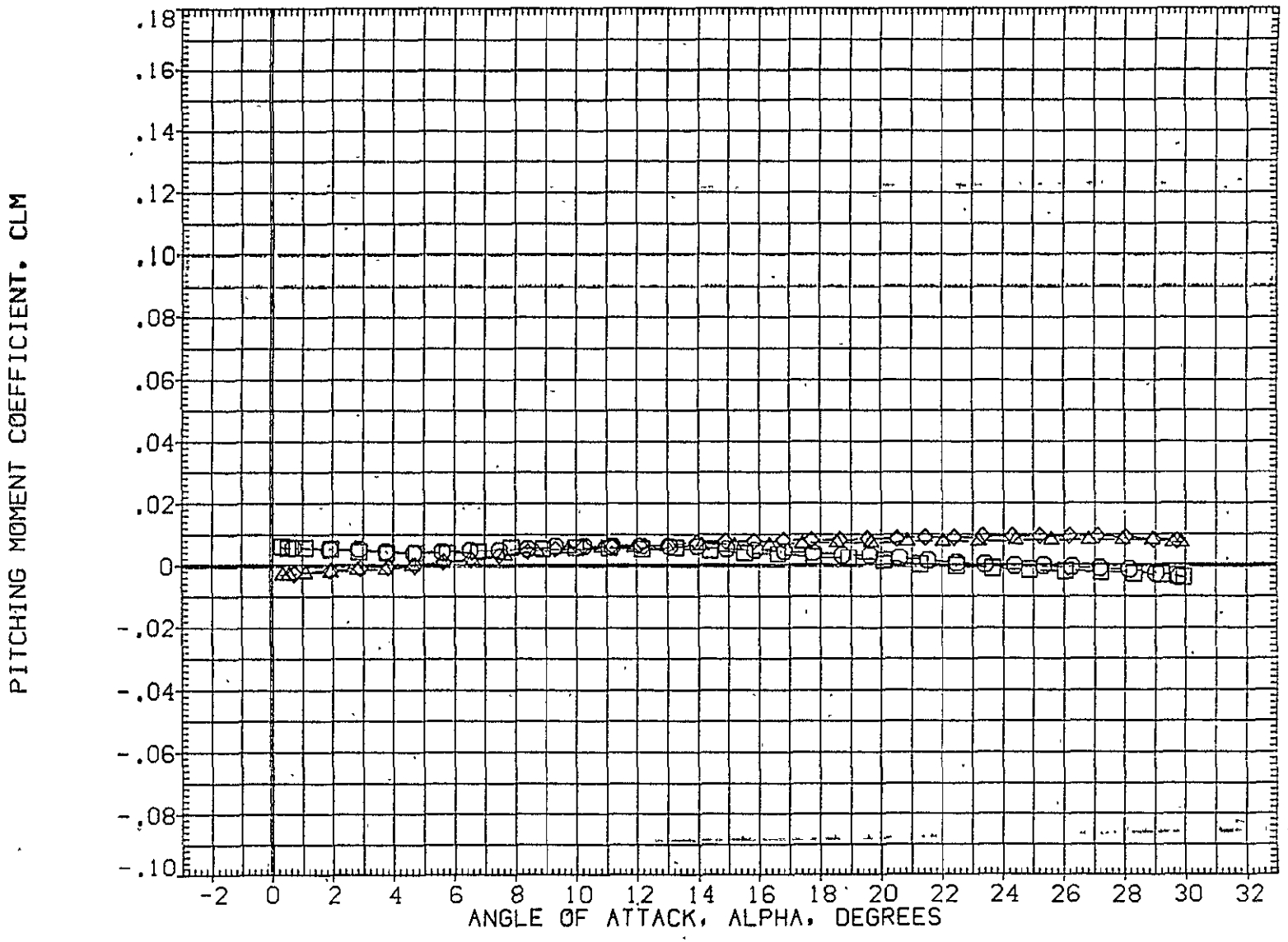


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATI(		
SREF	2690.0000	SQ
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

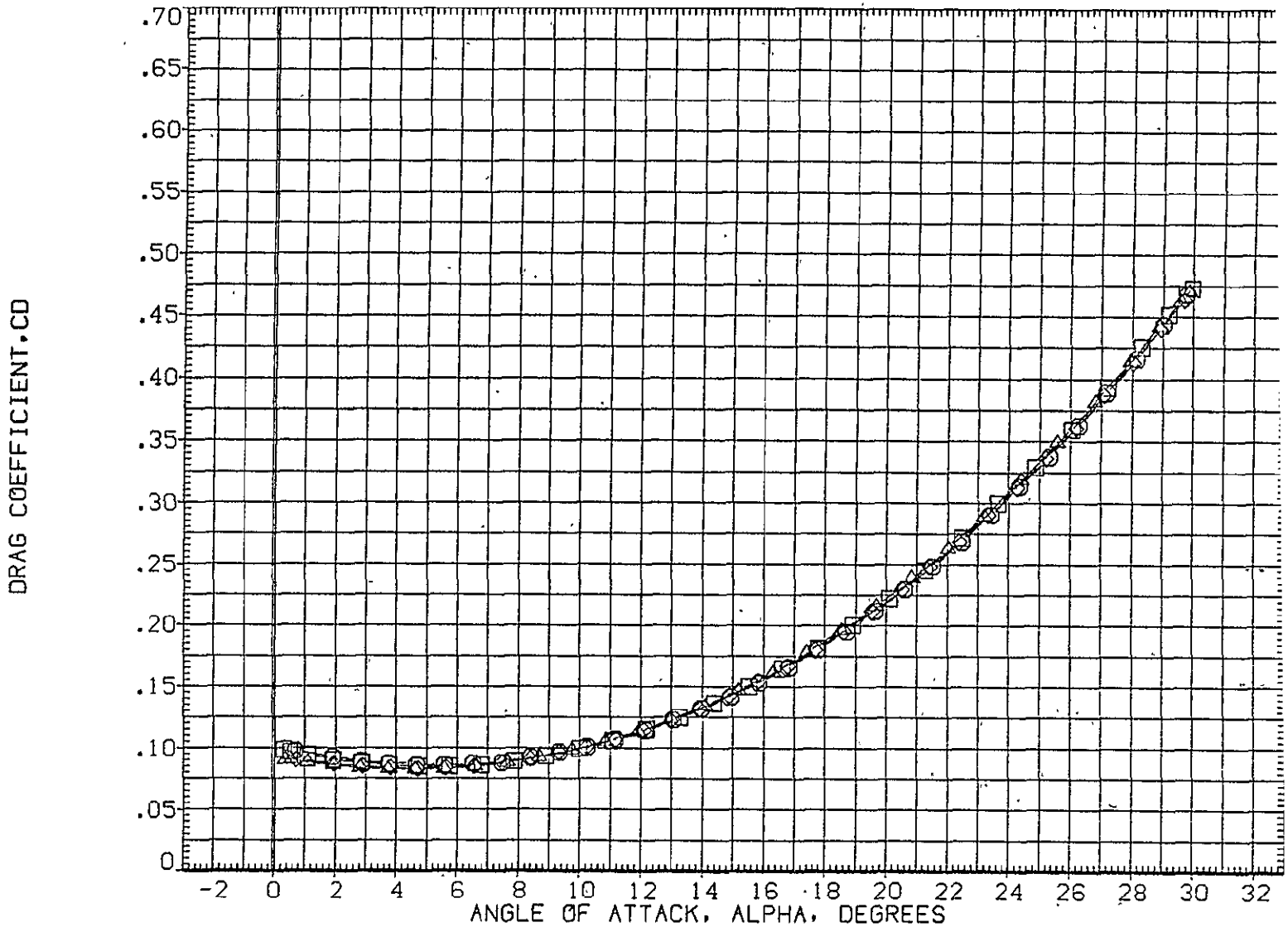


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

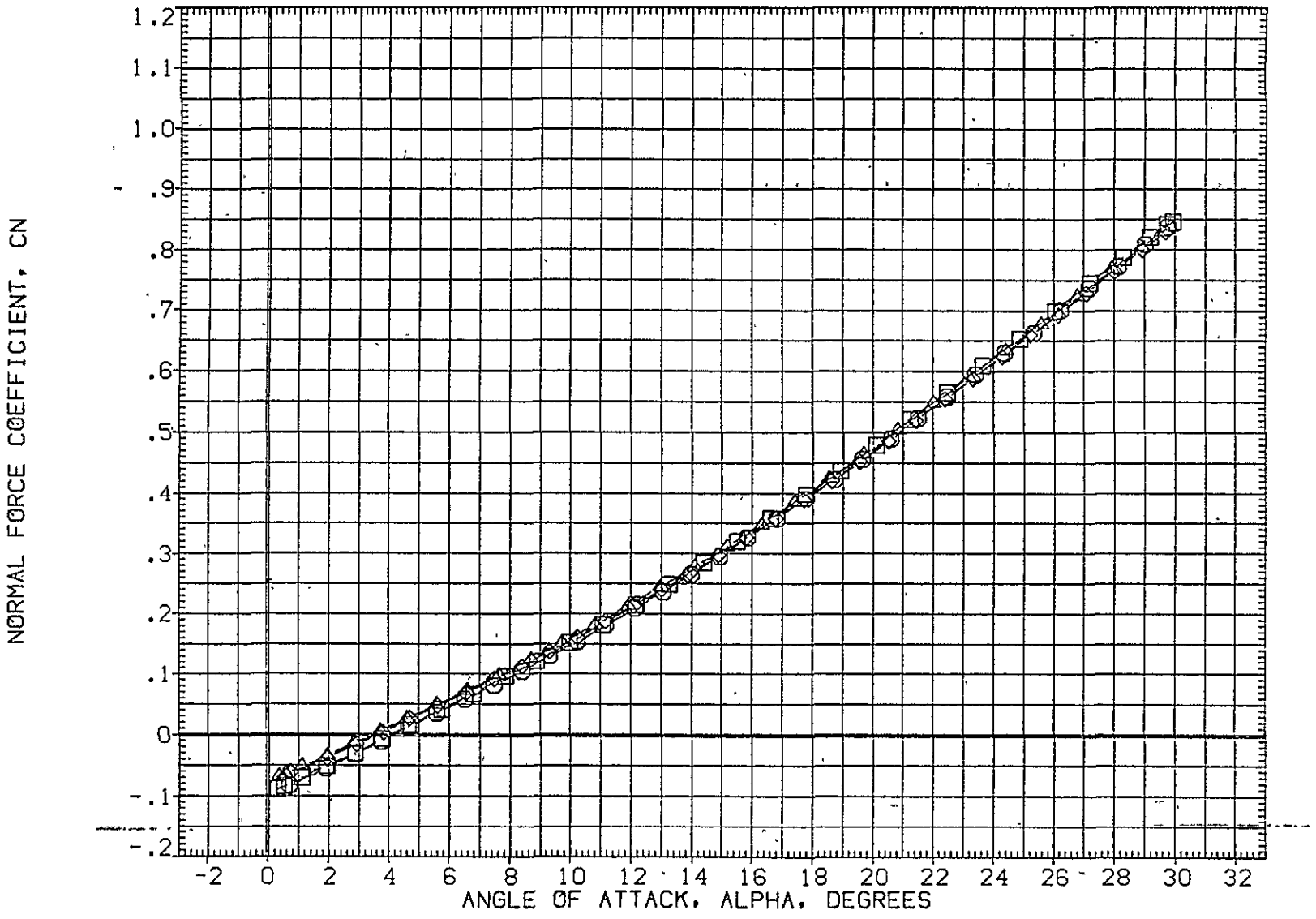


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATIC		
SREF	2690.0000	SQ
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

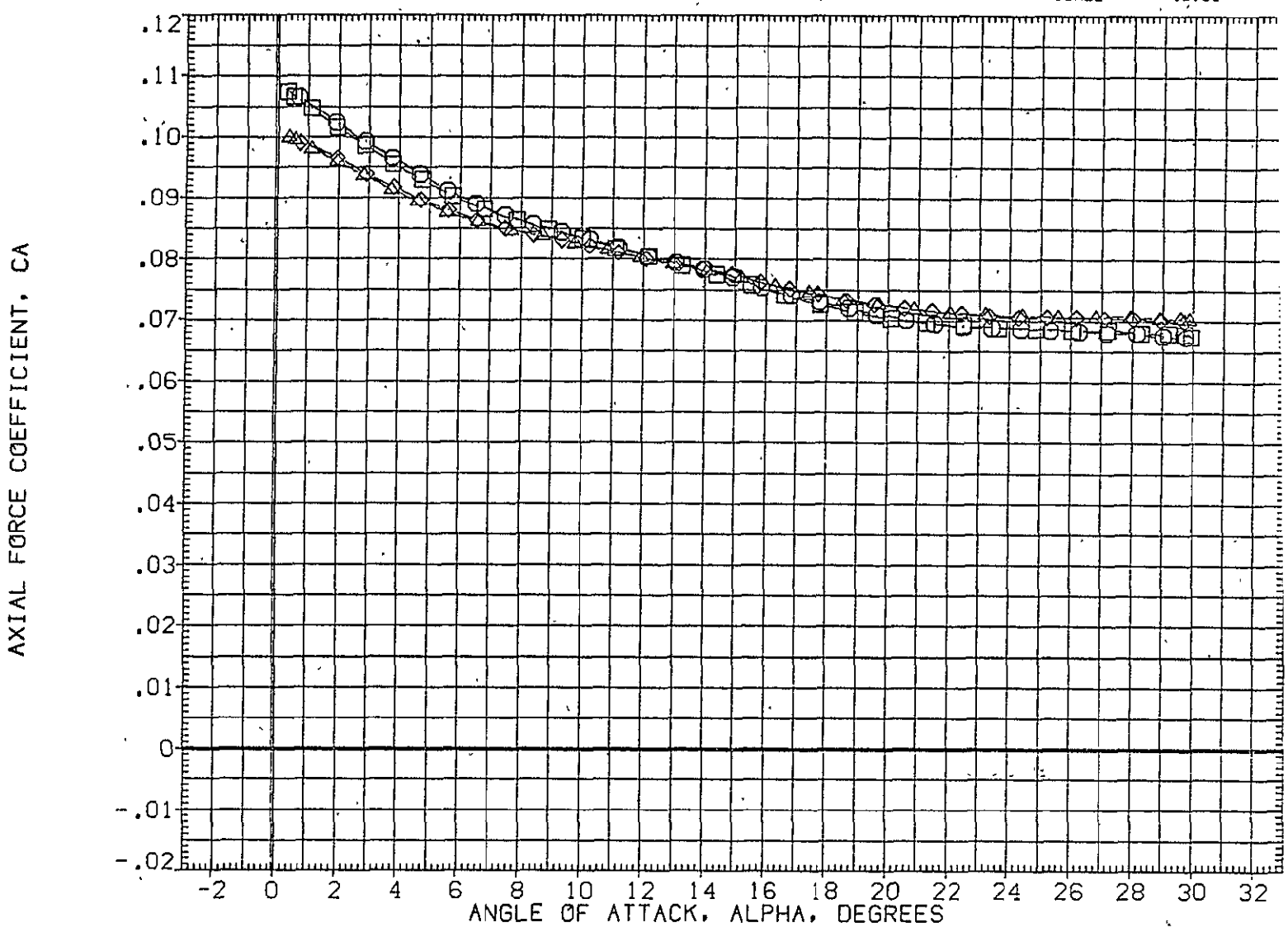


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN, XO
YMRP	.0000	IN, YO
ZMRP	375.0000	IN, ZO
SCALE	.0150	

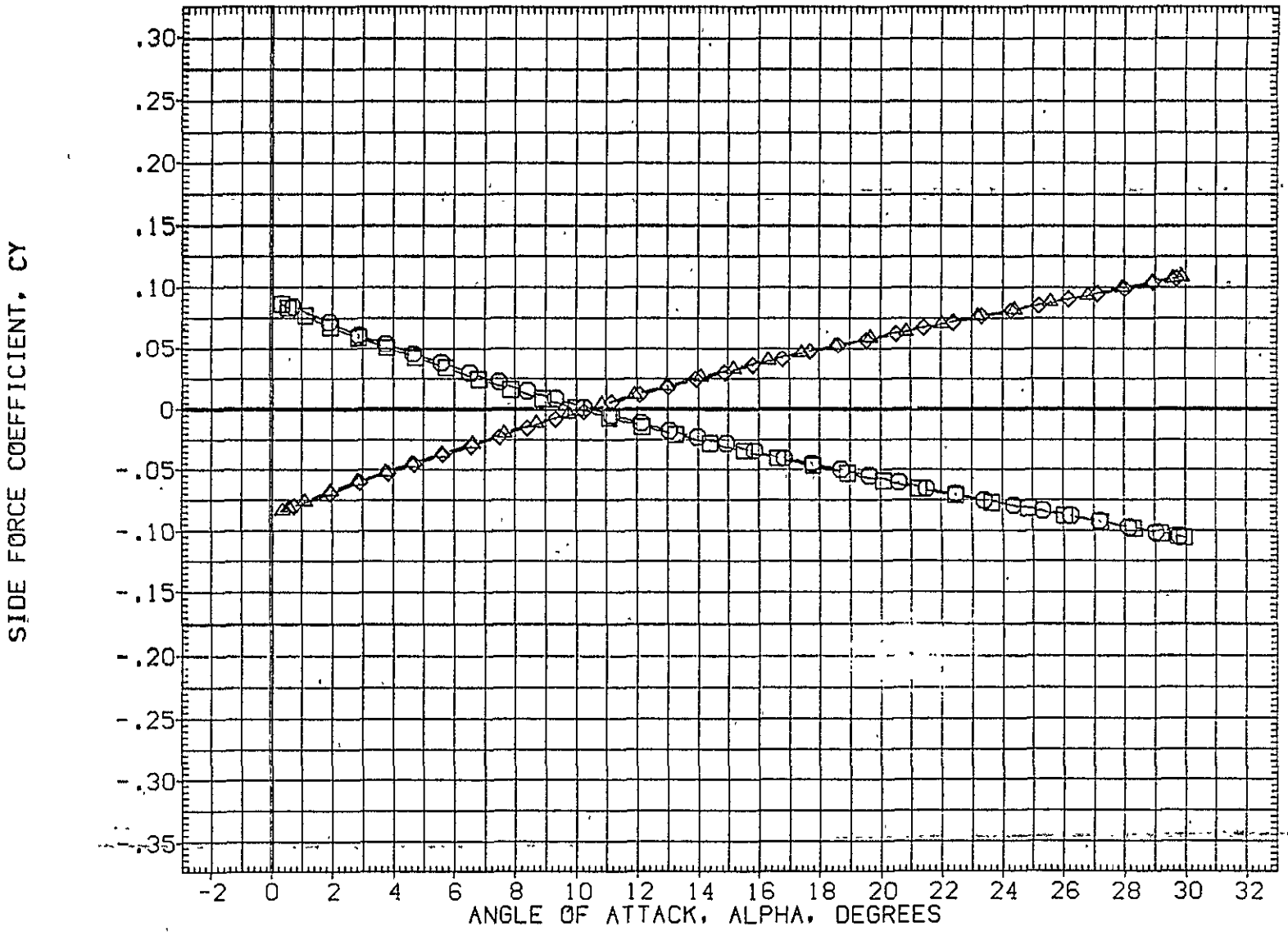


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

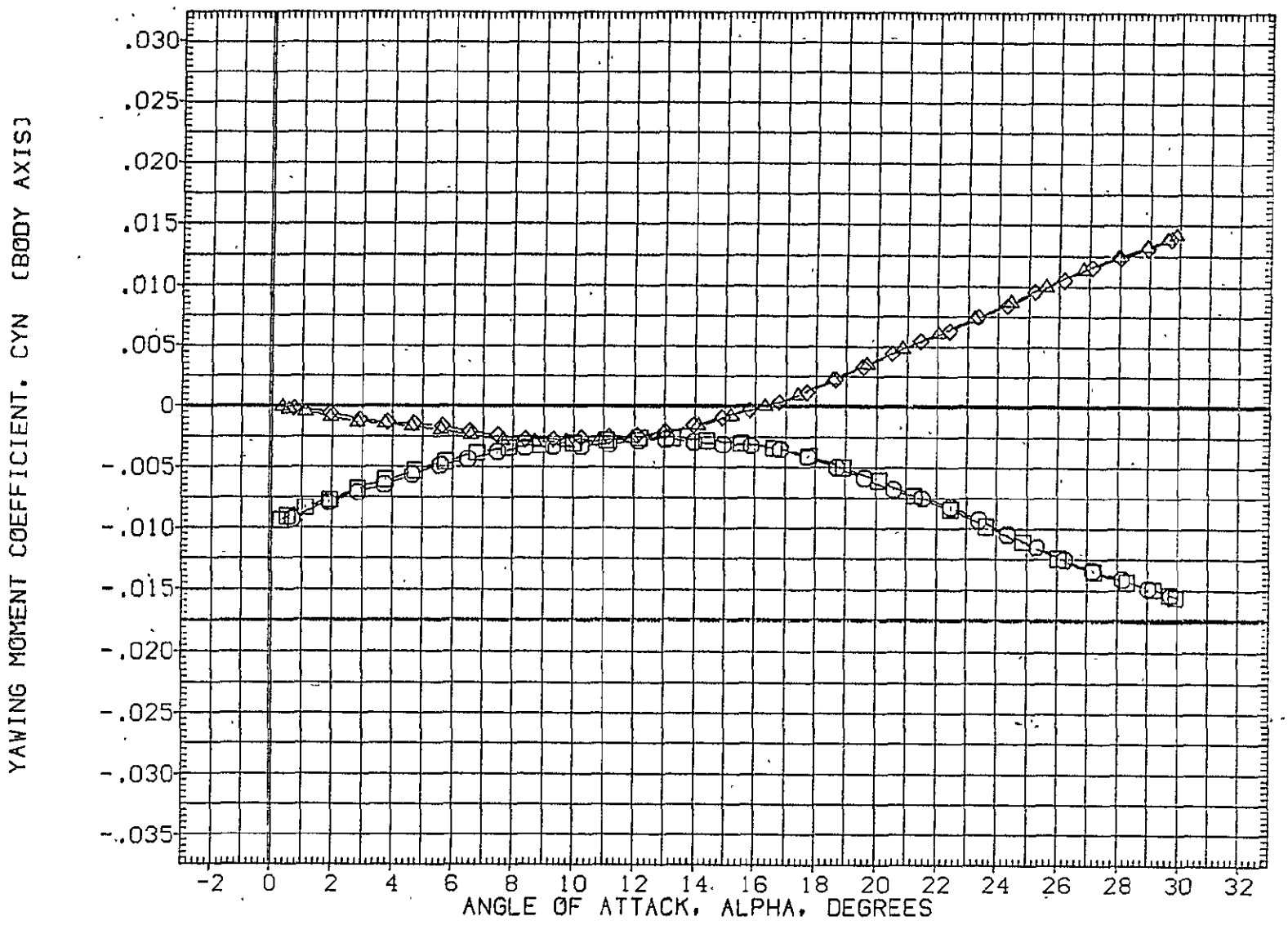


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY058)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

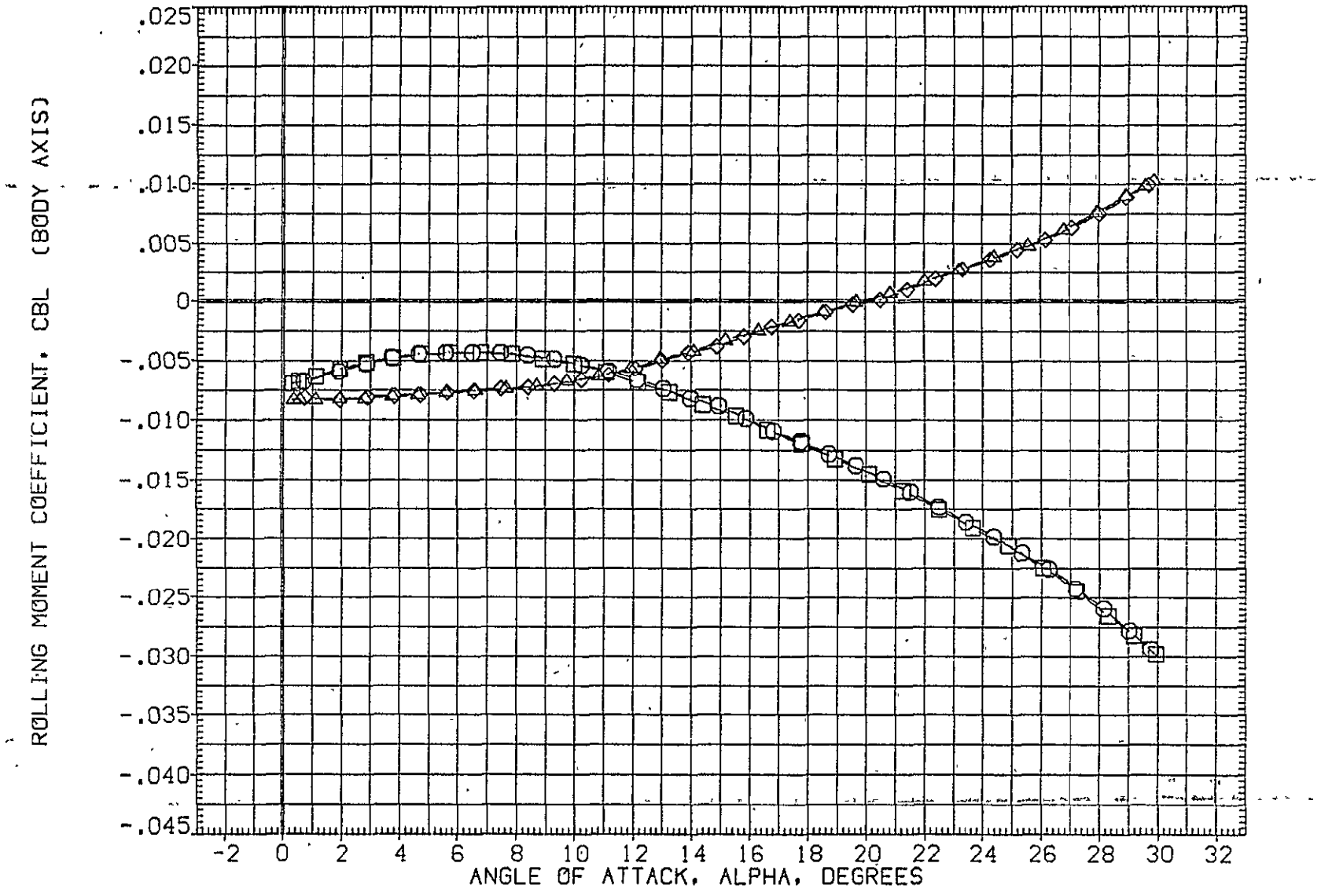


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI .	A-SCHD
(RHY058)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	1.000
(RHY059)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	30.000	2.000
(RHY060)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	1.000
(RHY061)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-30.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

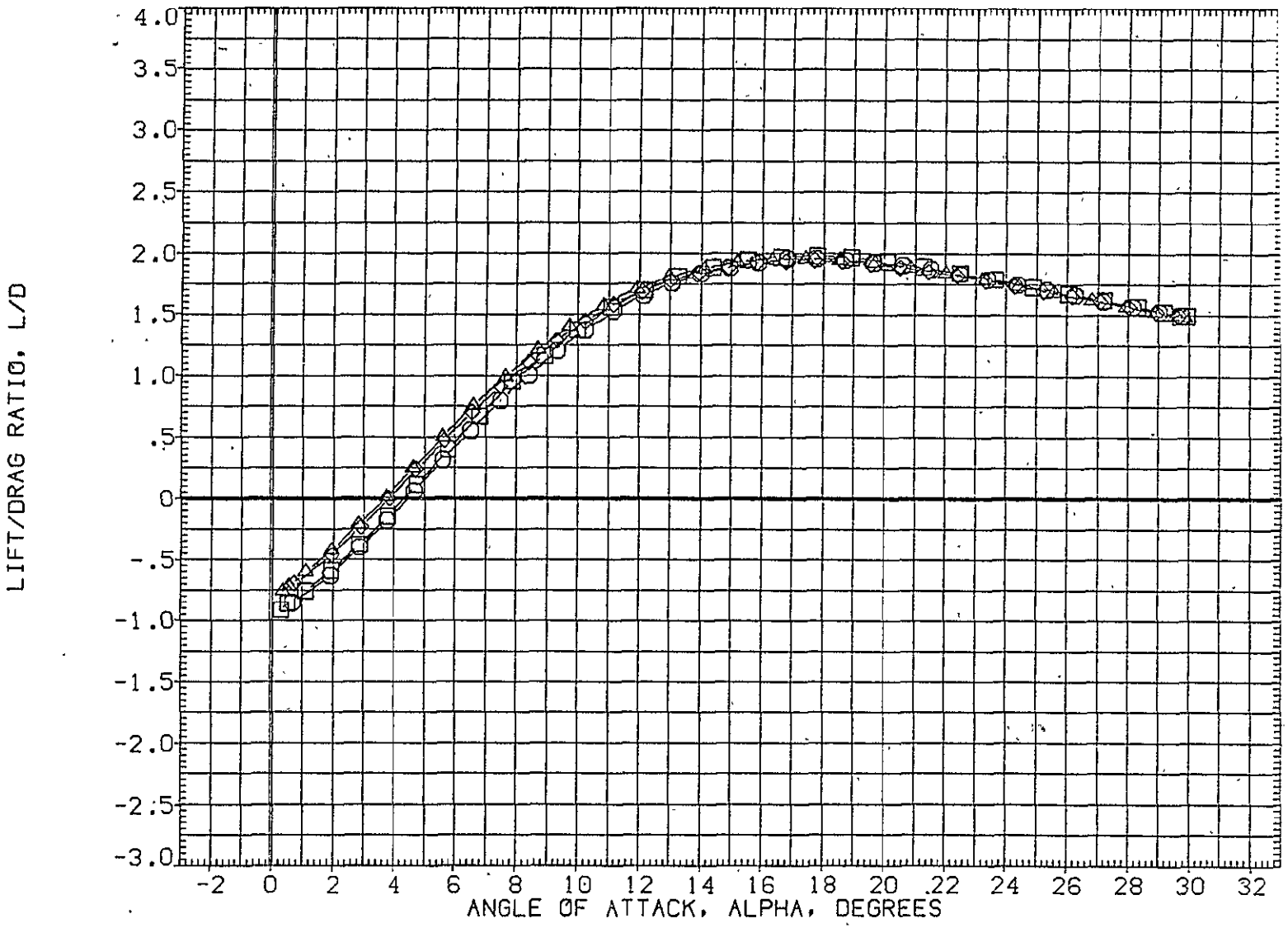


FIG 18 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 30, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHYO62)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHYO63)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHYO64)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHYO65)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

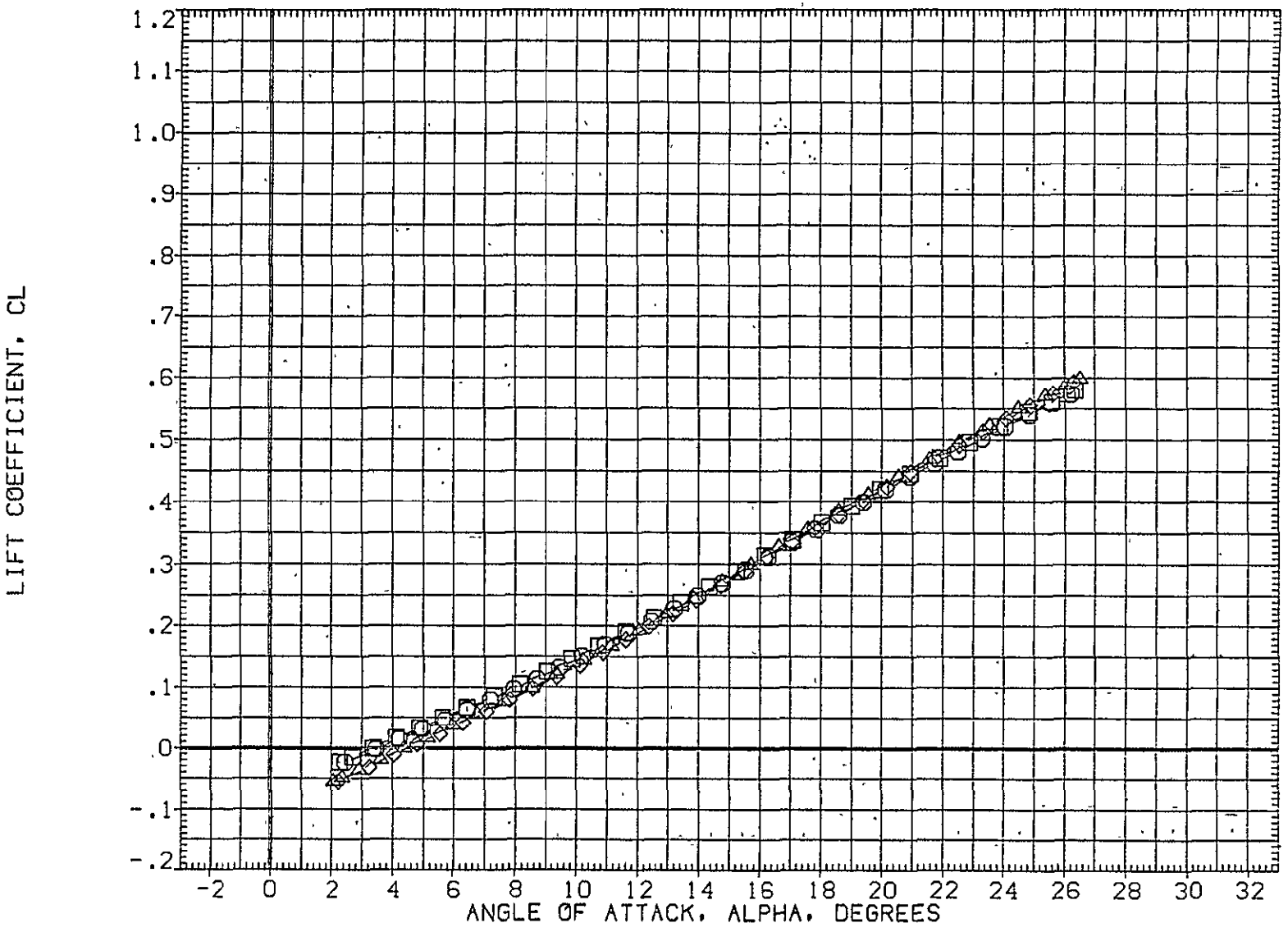


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, .GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATIC		
SREF	2690.0000	SQ
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

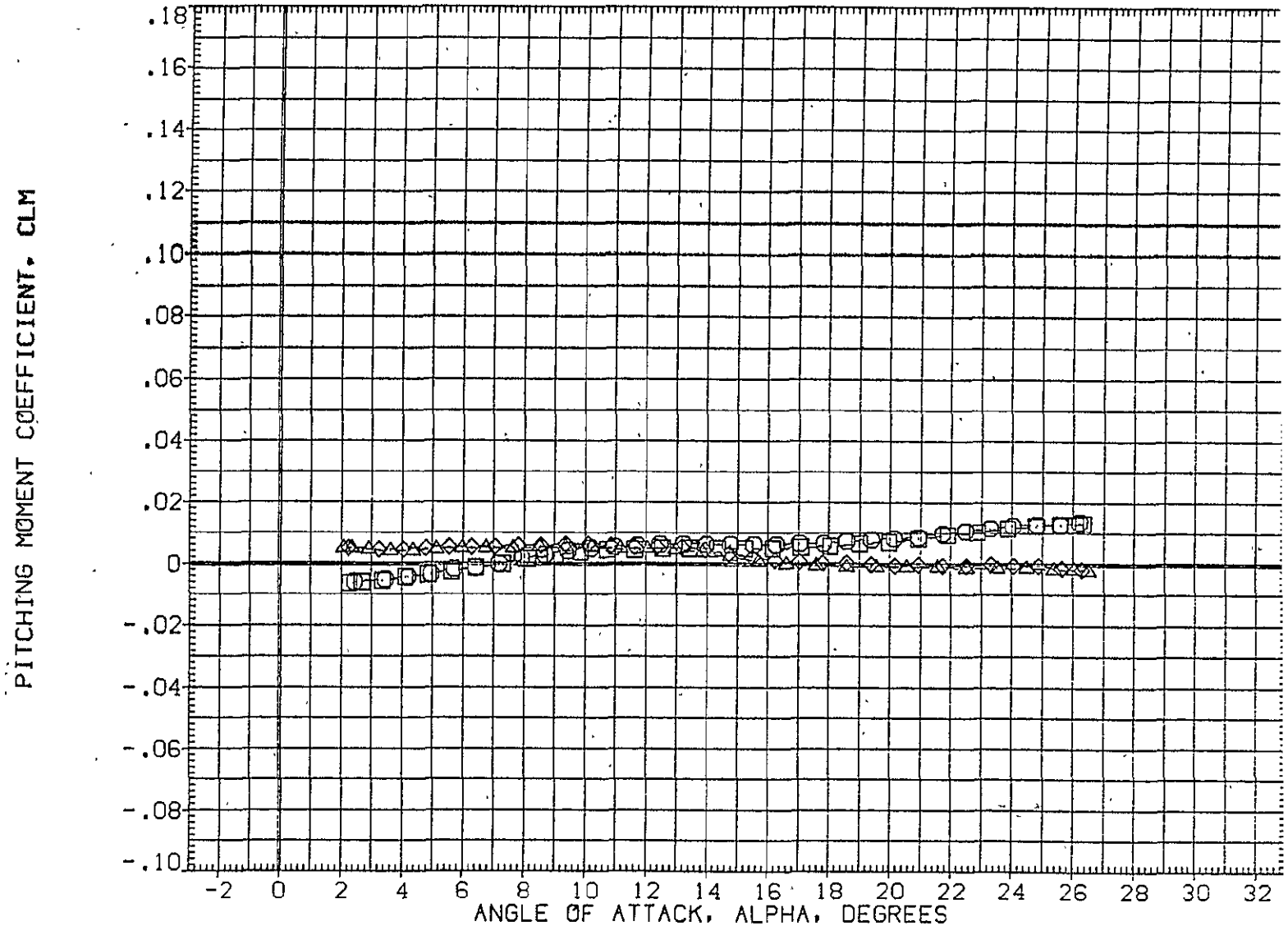


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

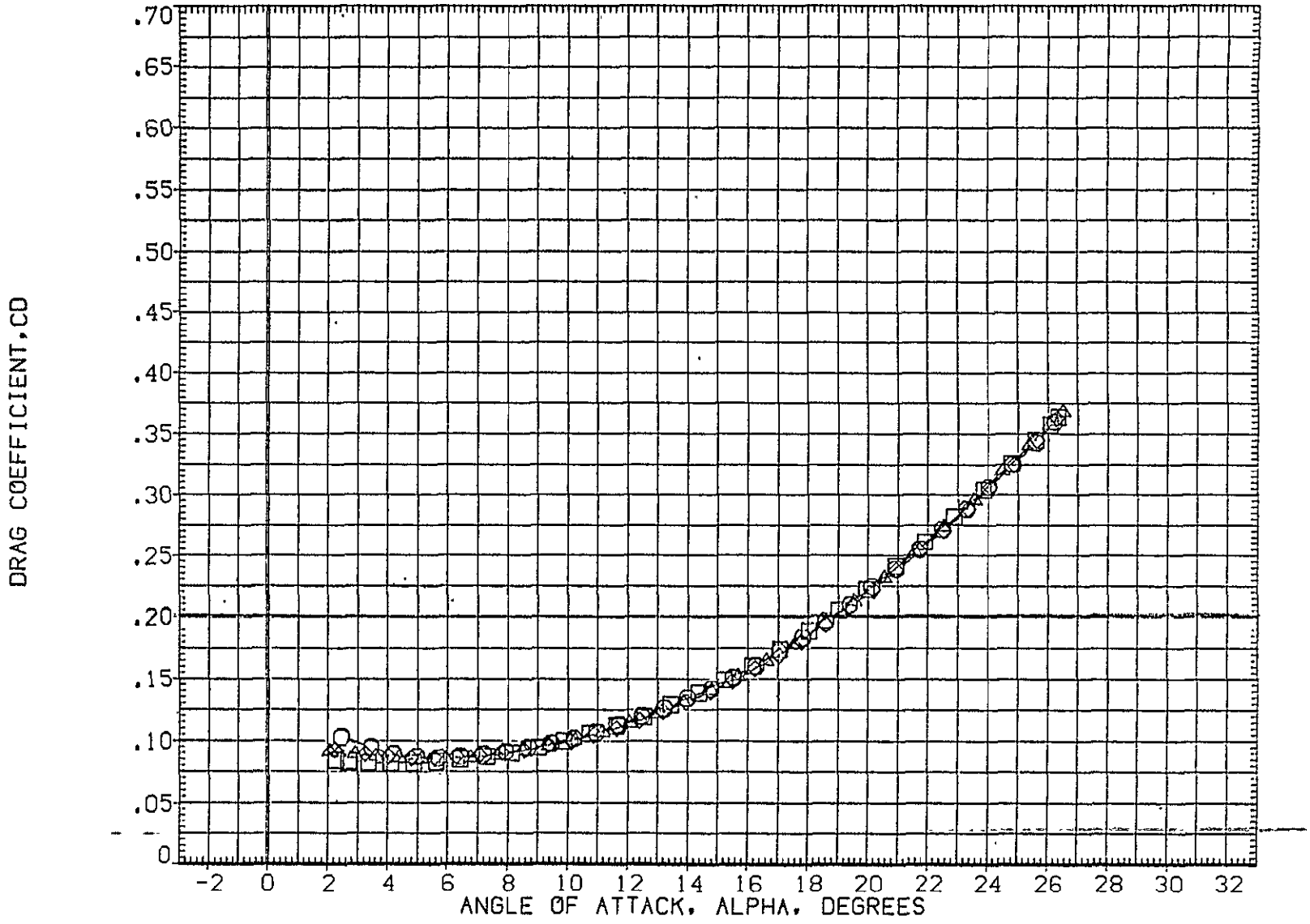


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

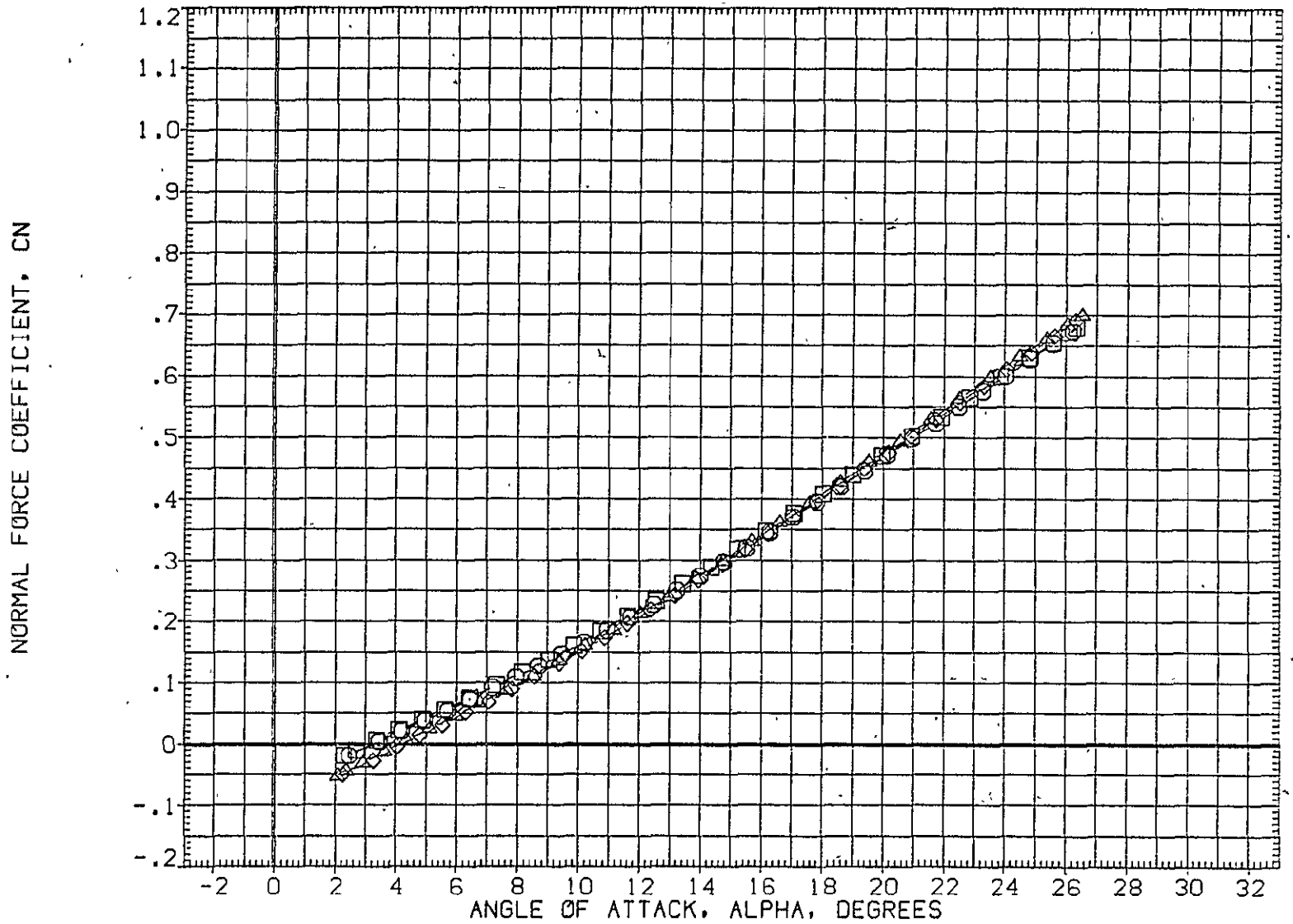


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

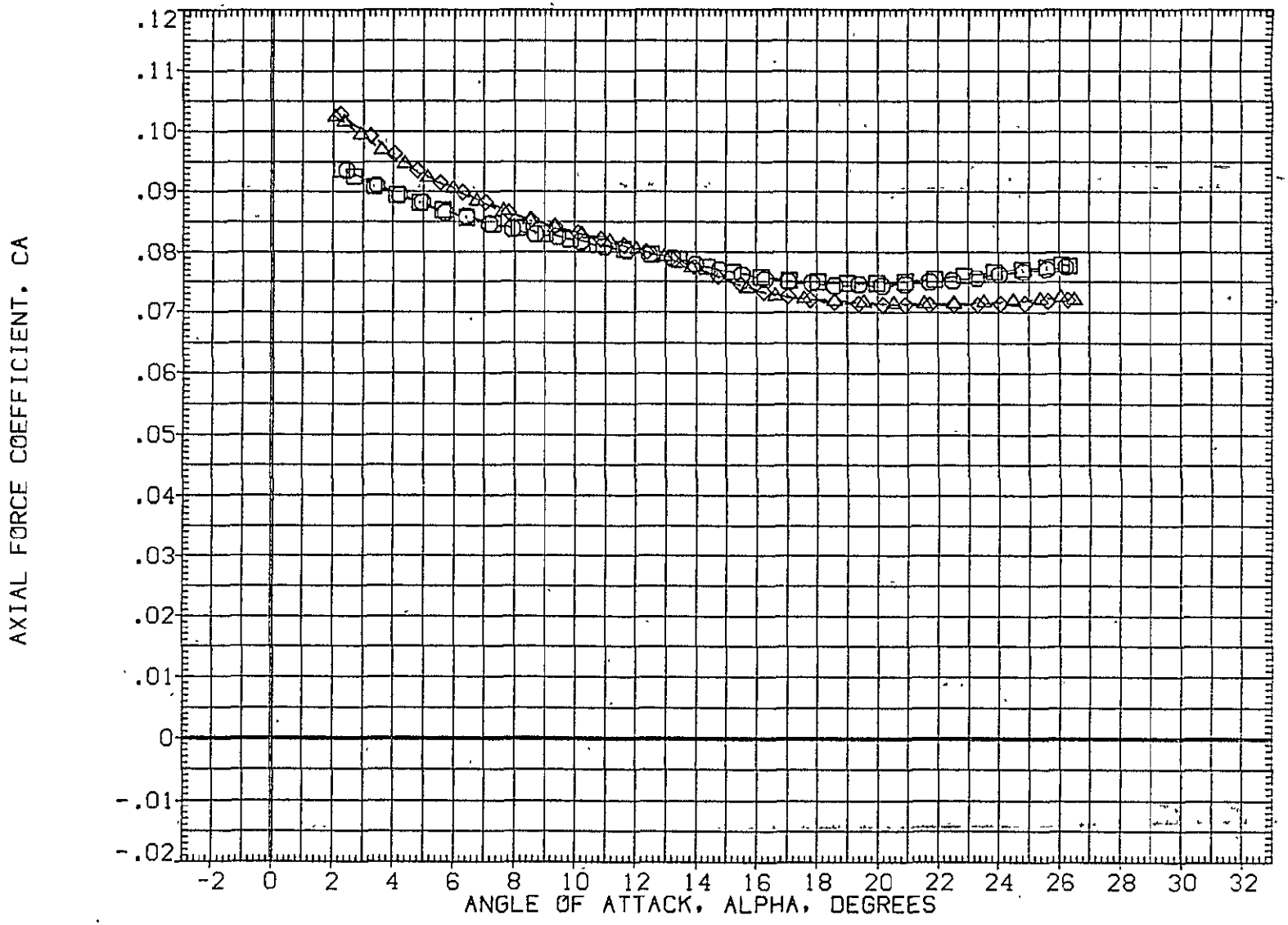


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHYO62)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHYO63)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHYO64)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHYO65)		LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000'	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

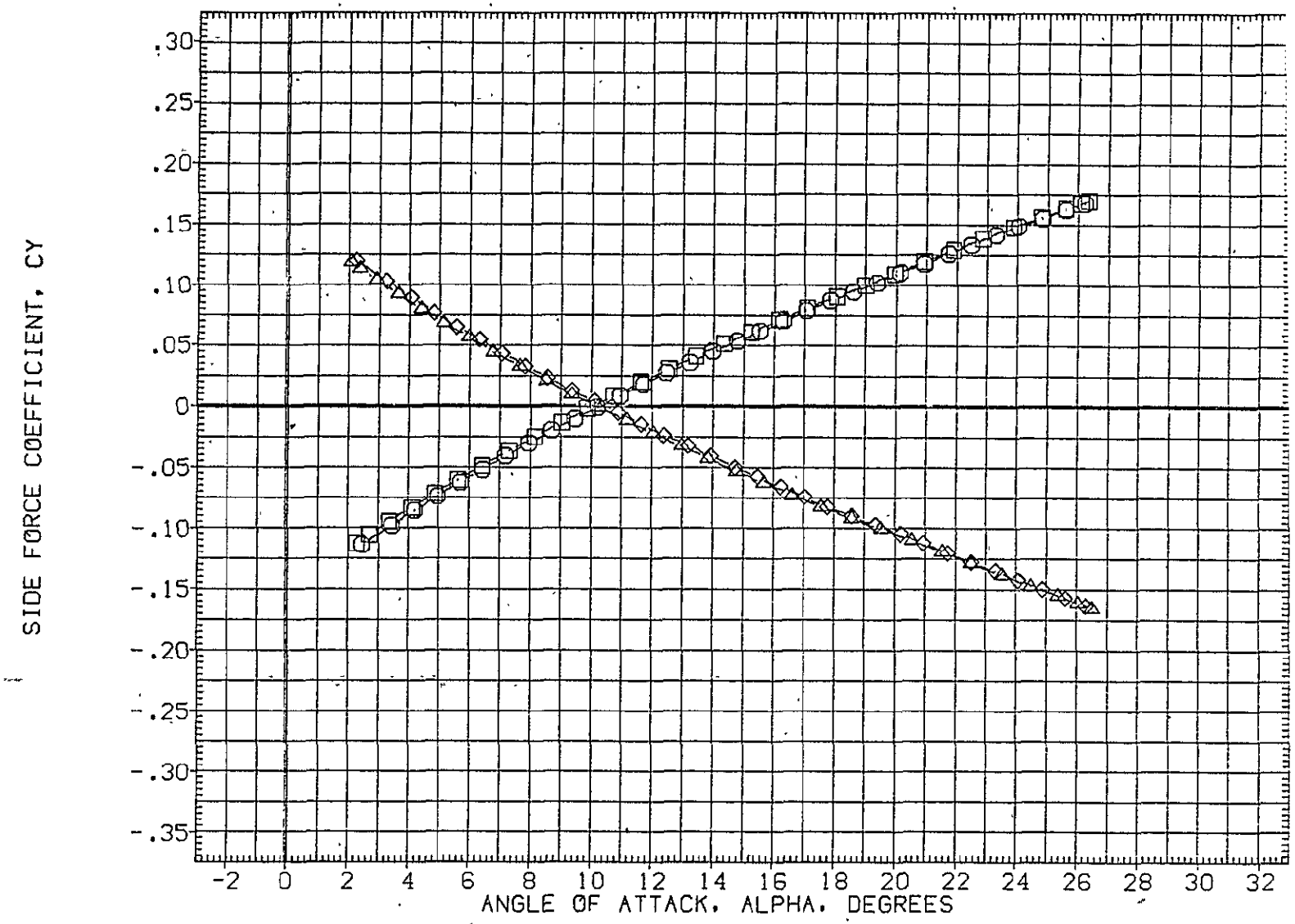


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	⊠	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

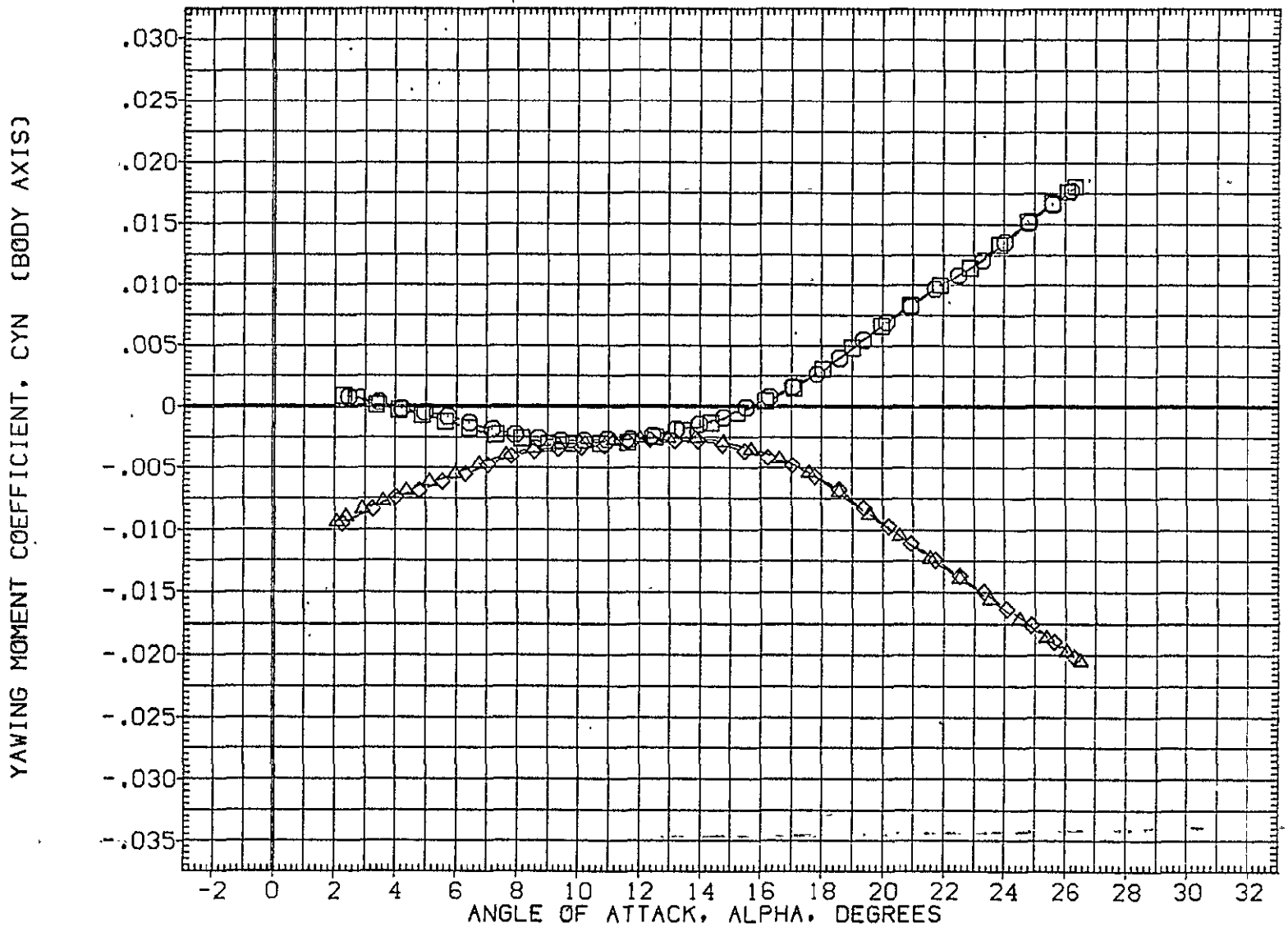


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

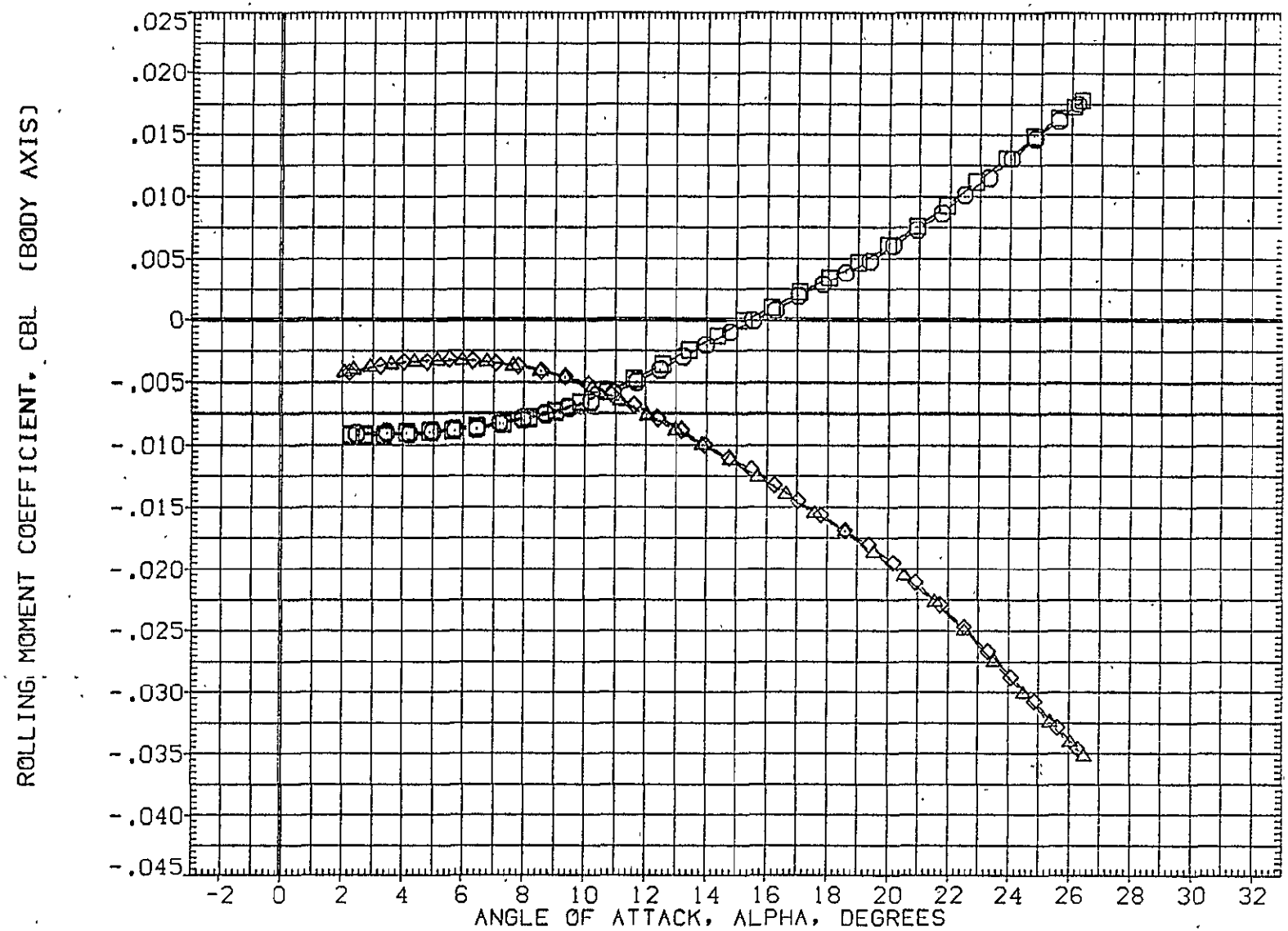


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI=.45, GRIT ON BOTH WINGS

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	PHI	A-SCHD
(RHY062)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	1.000
(RHY063)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	45.000	2.000
(RHY064)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	1.000
(RHY065)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	-45.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

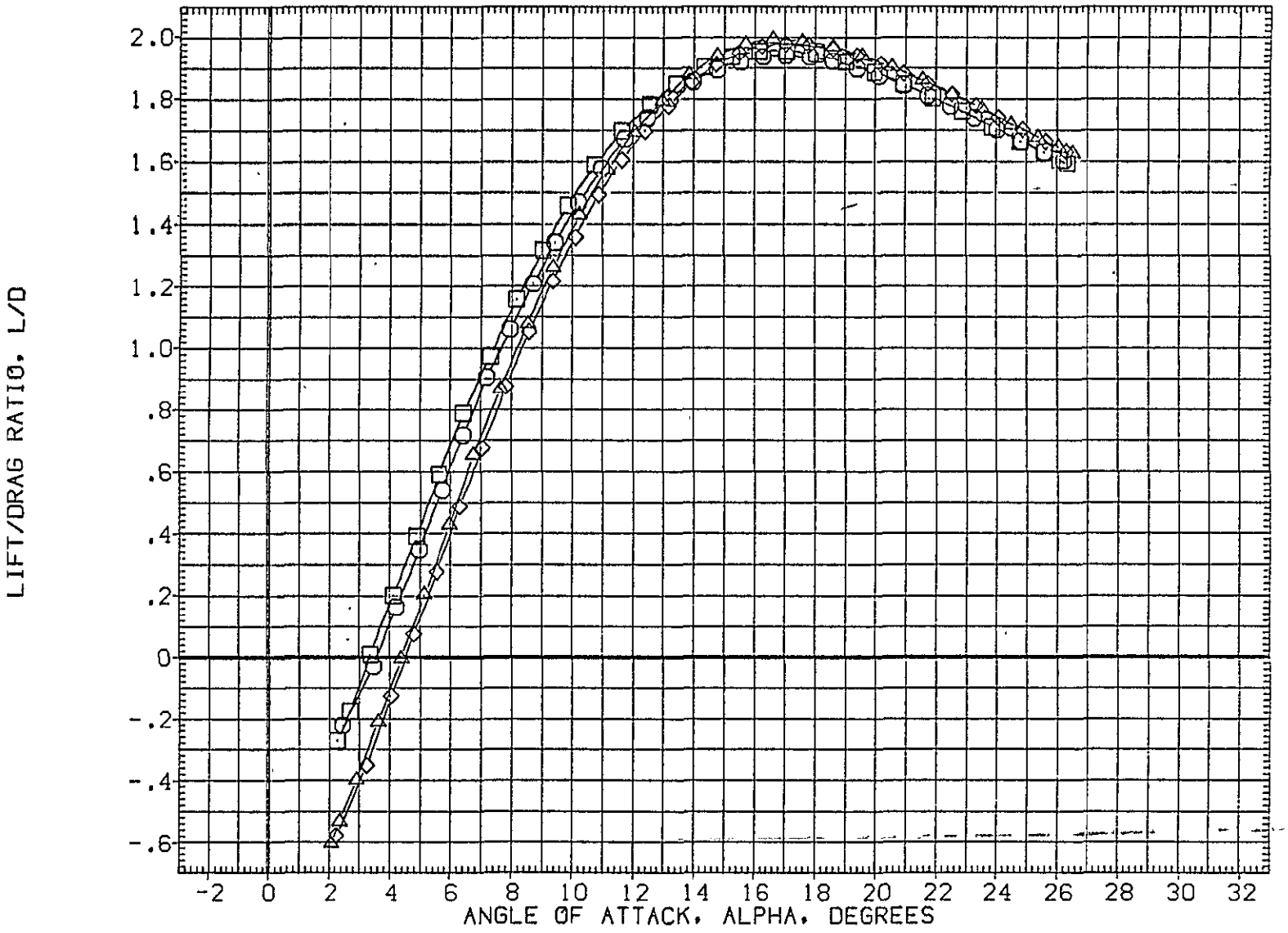


FIG 19 EFFECT OF COMBINED ALPHA/BETA VARIATIONS (PHI= 45, GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

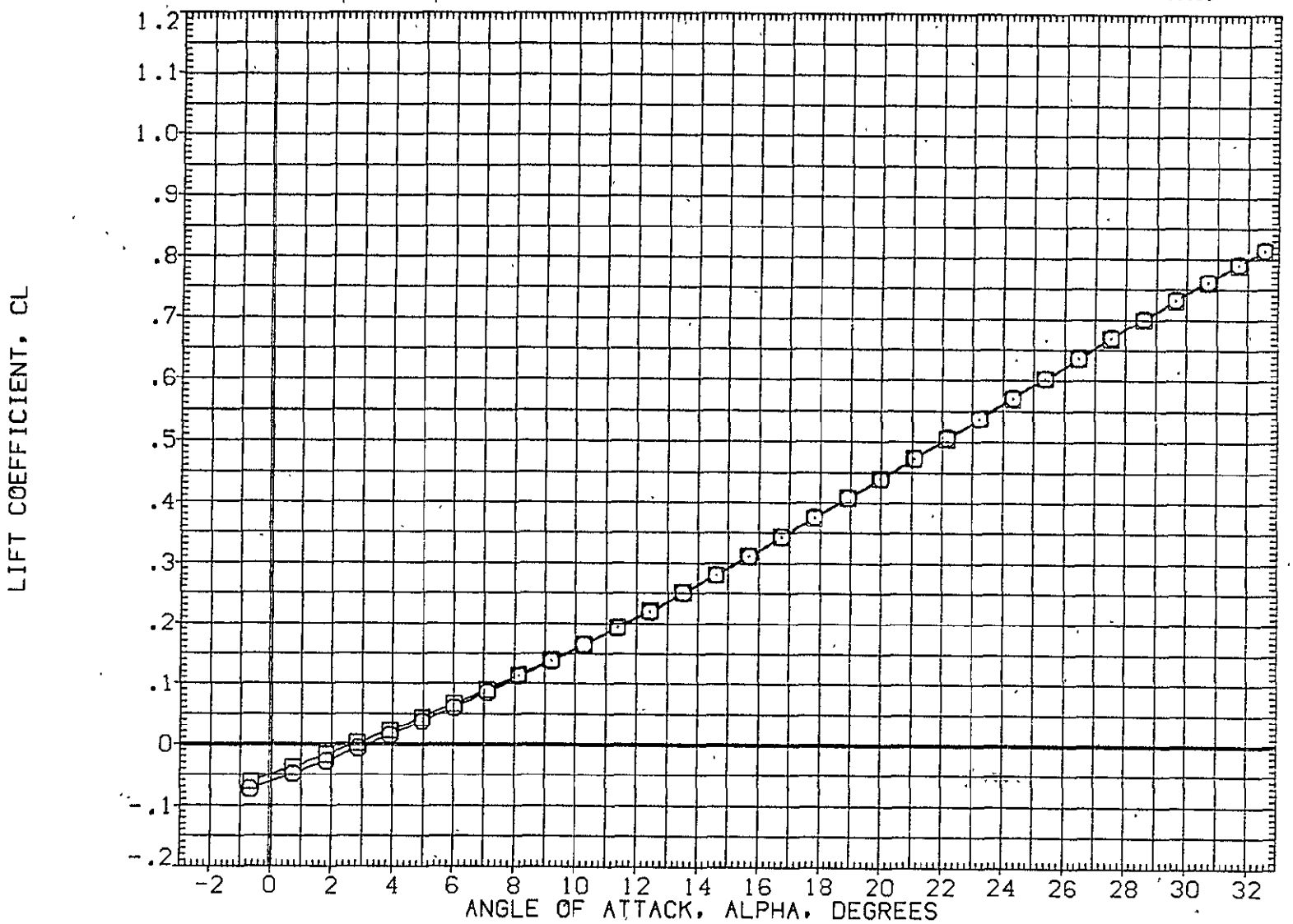


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

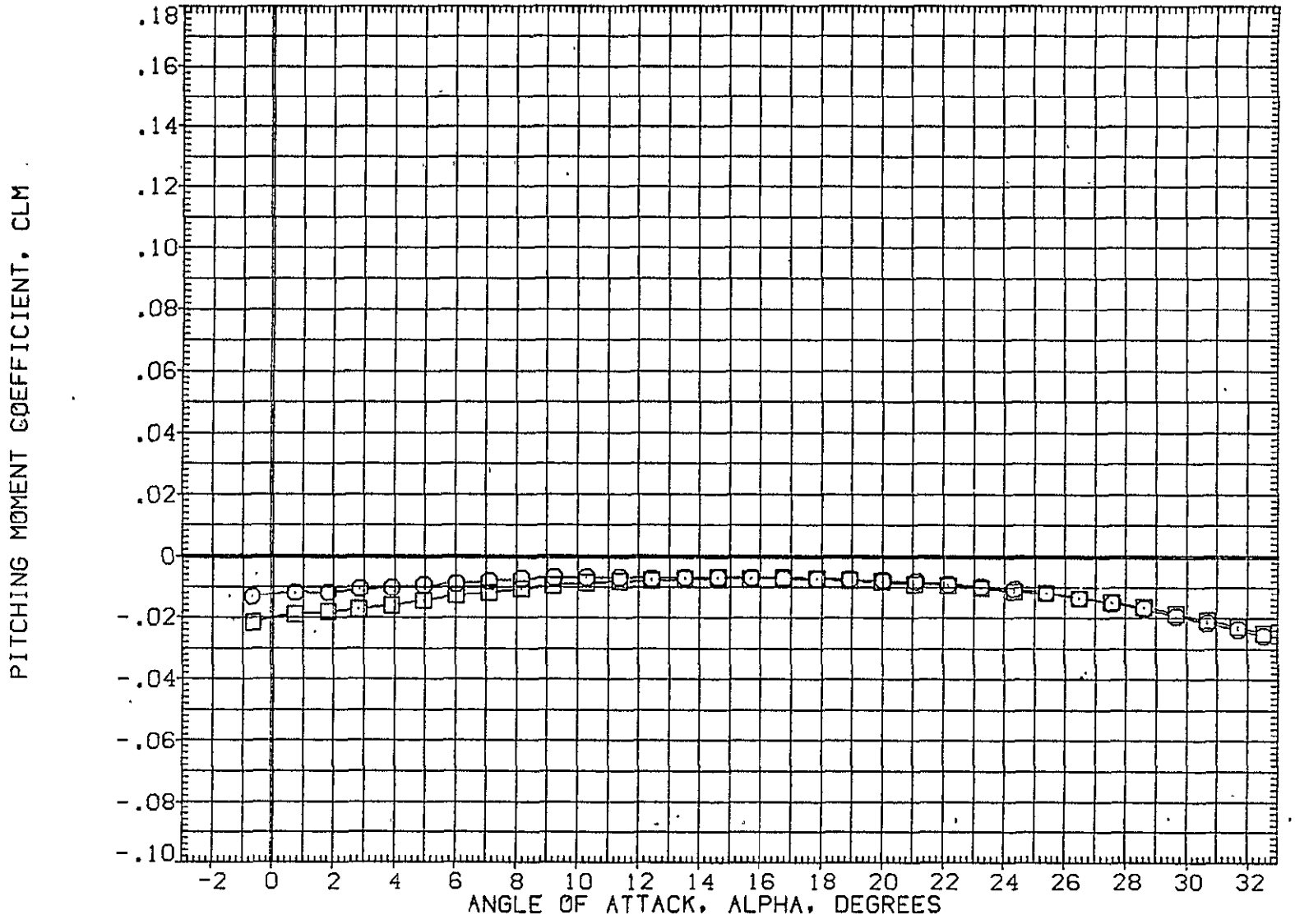


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

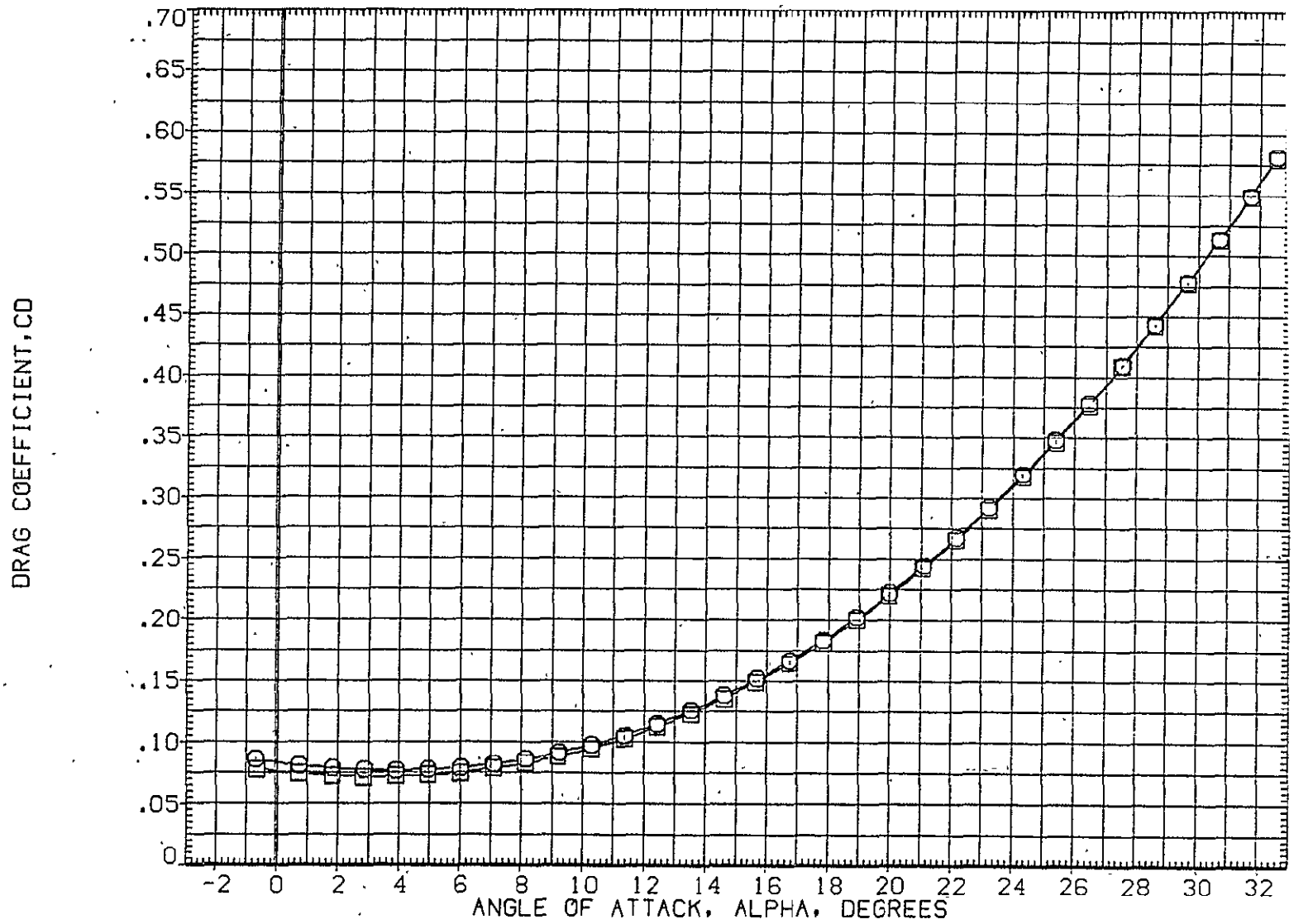


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

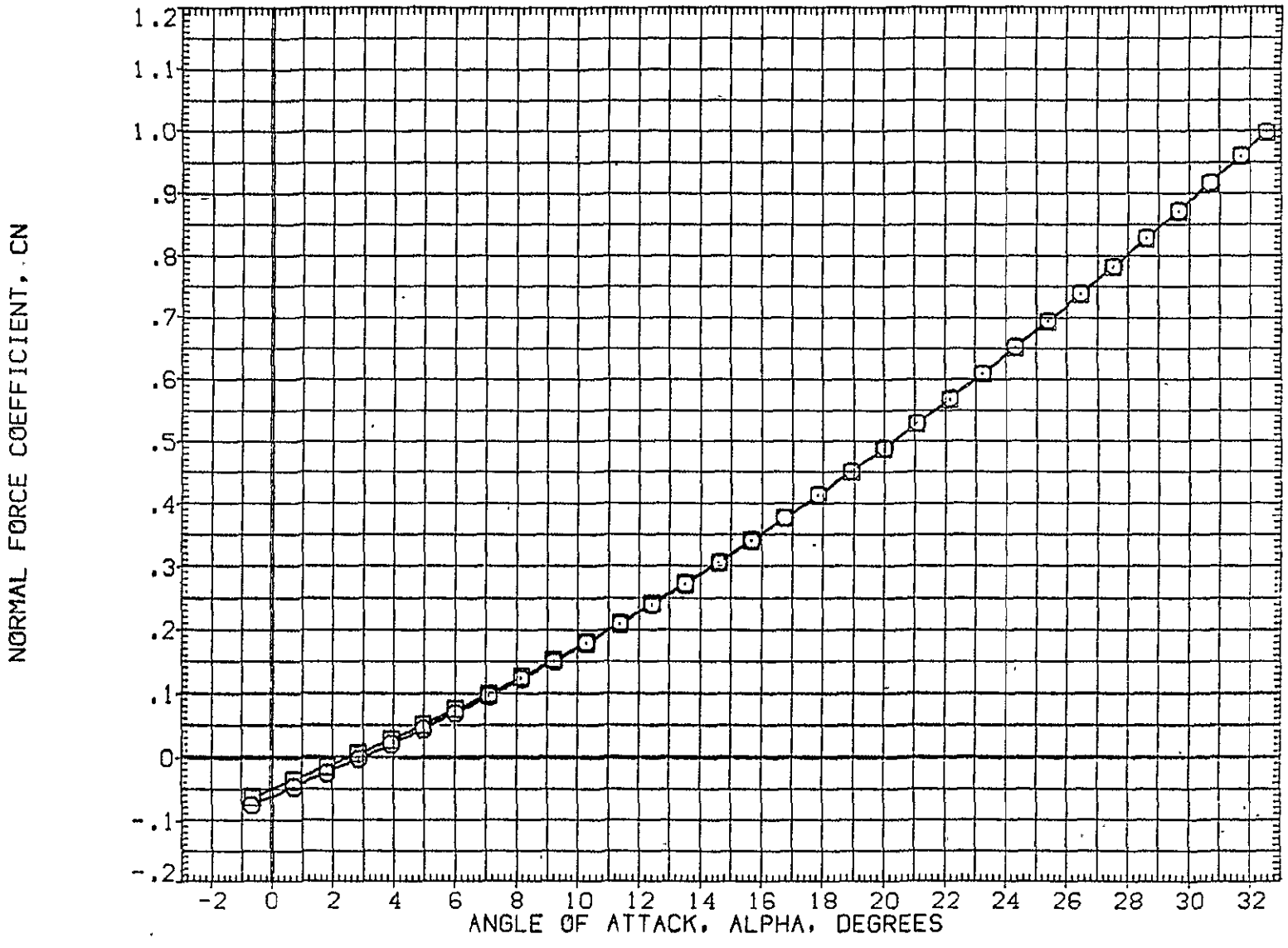


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

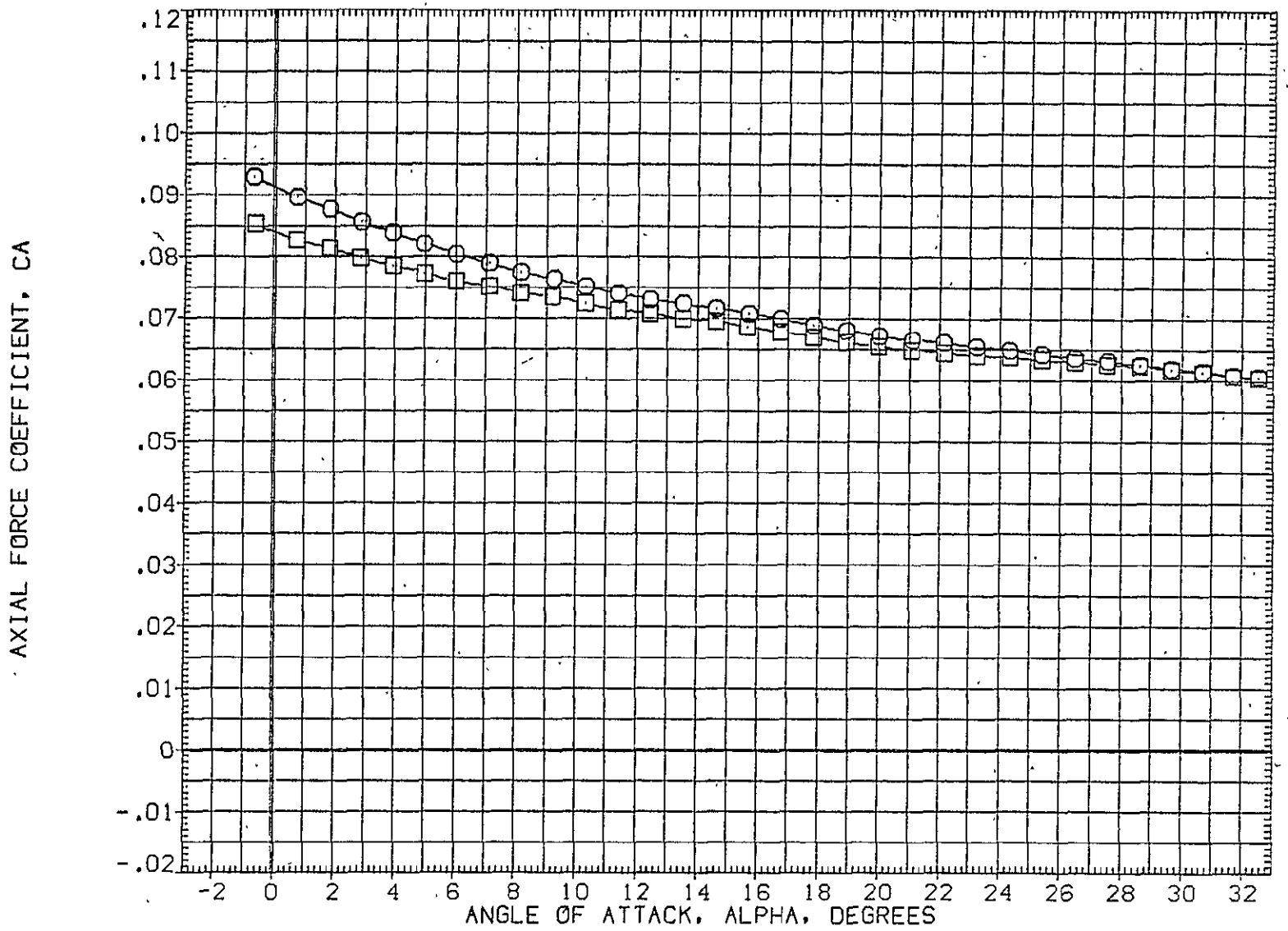


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

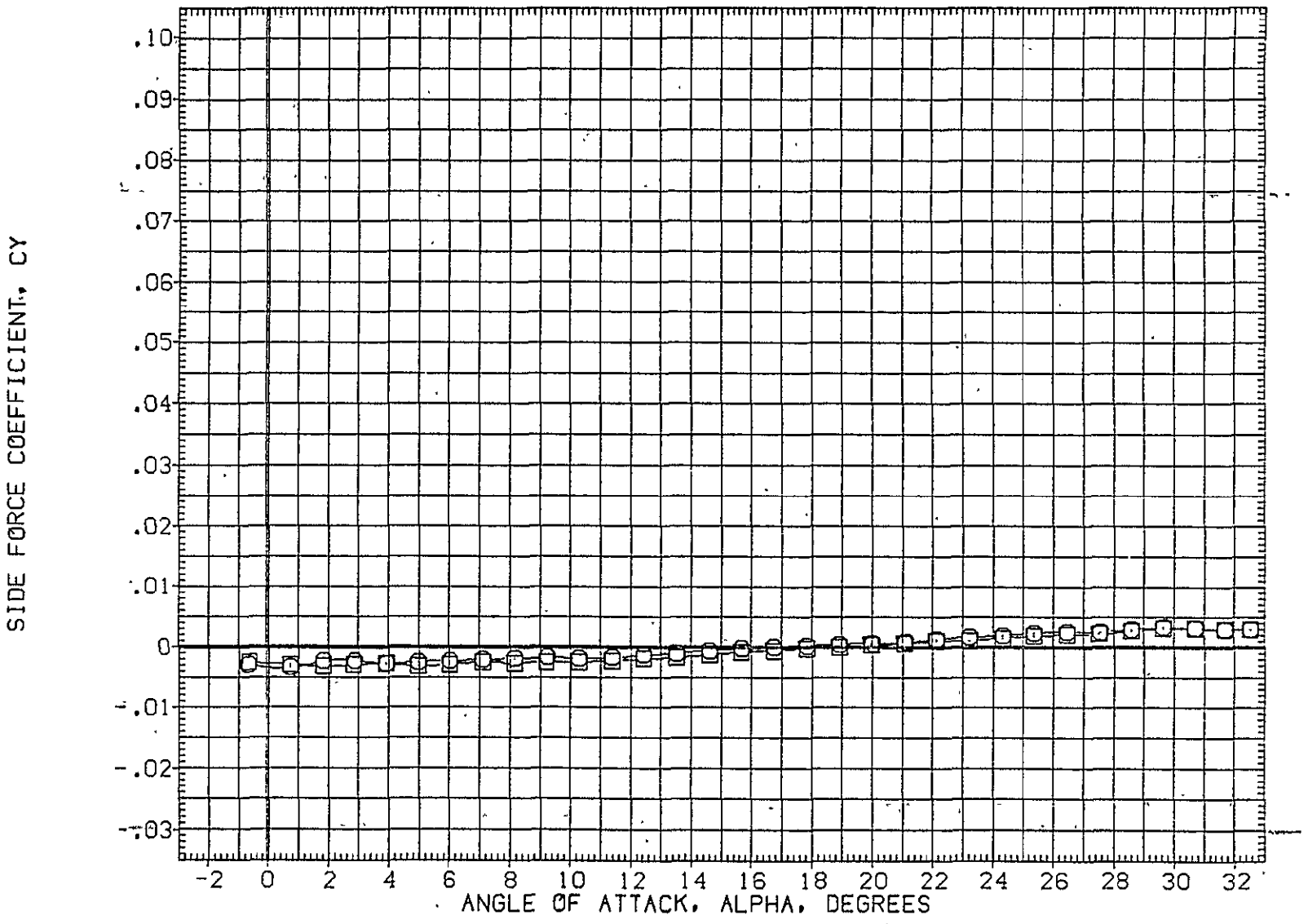


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO15) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHYO66) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

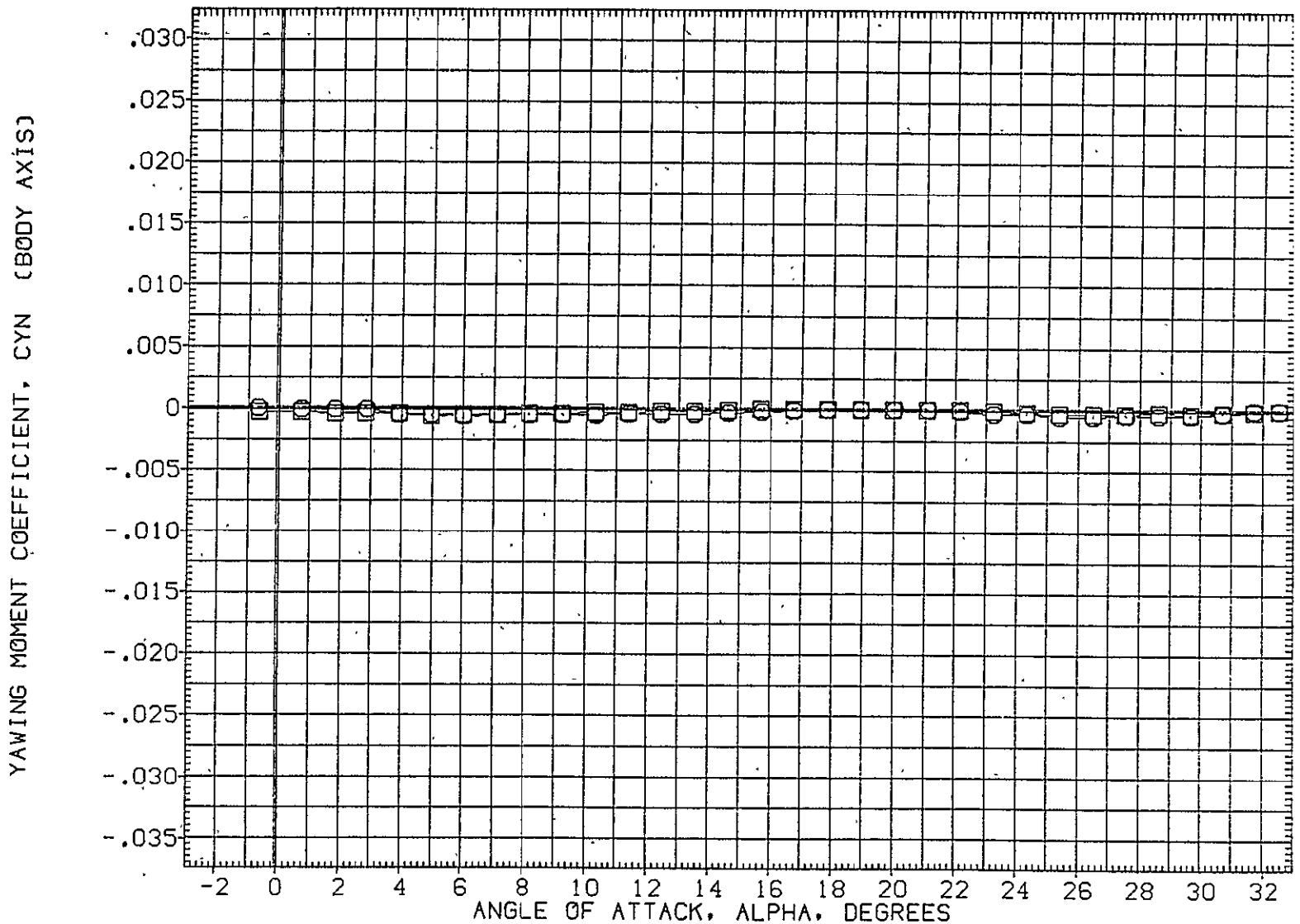


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (8WVF0)	.000	.000	1.000	1.000
(RHY066)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (8WVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

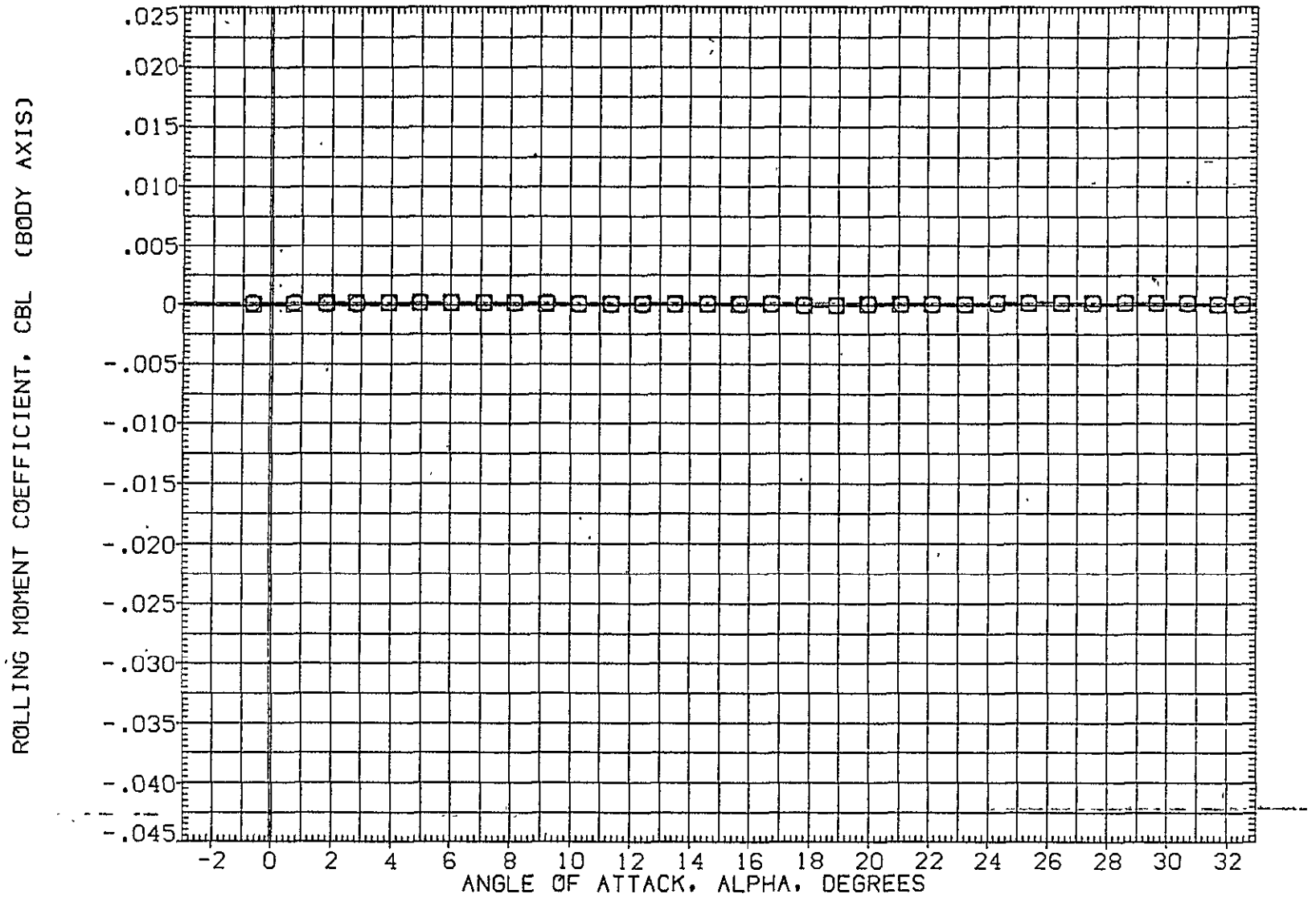


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY015)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	1.000	1.000
(RHY066.)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

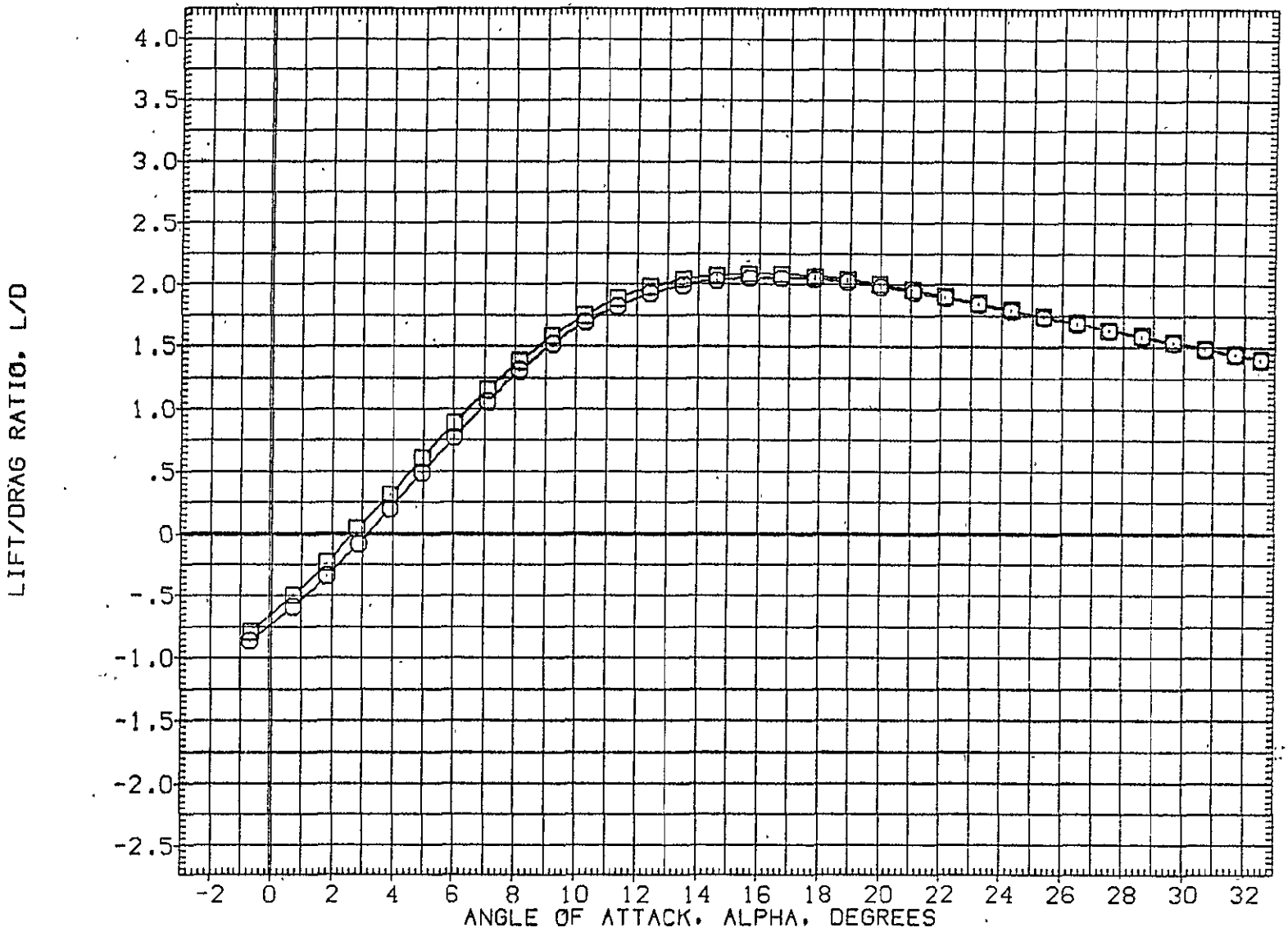


FIG 20 EFFECT OF OMS PODS (NO GRIT)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	◁□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

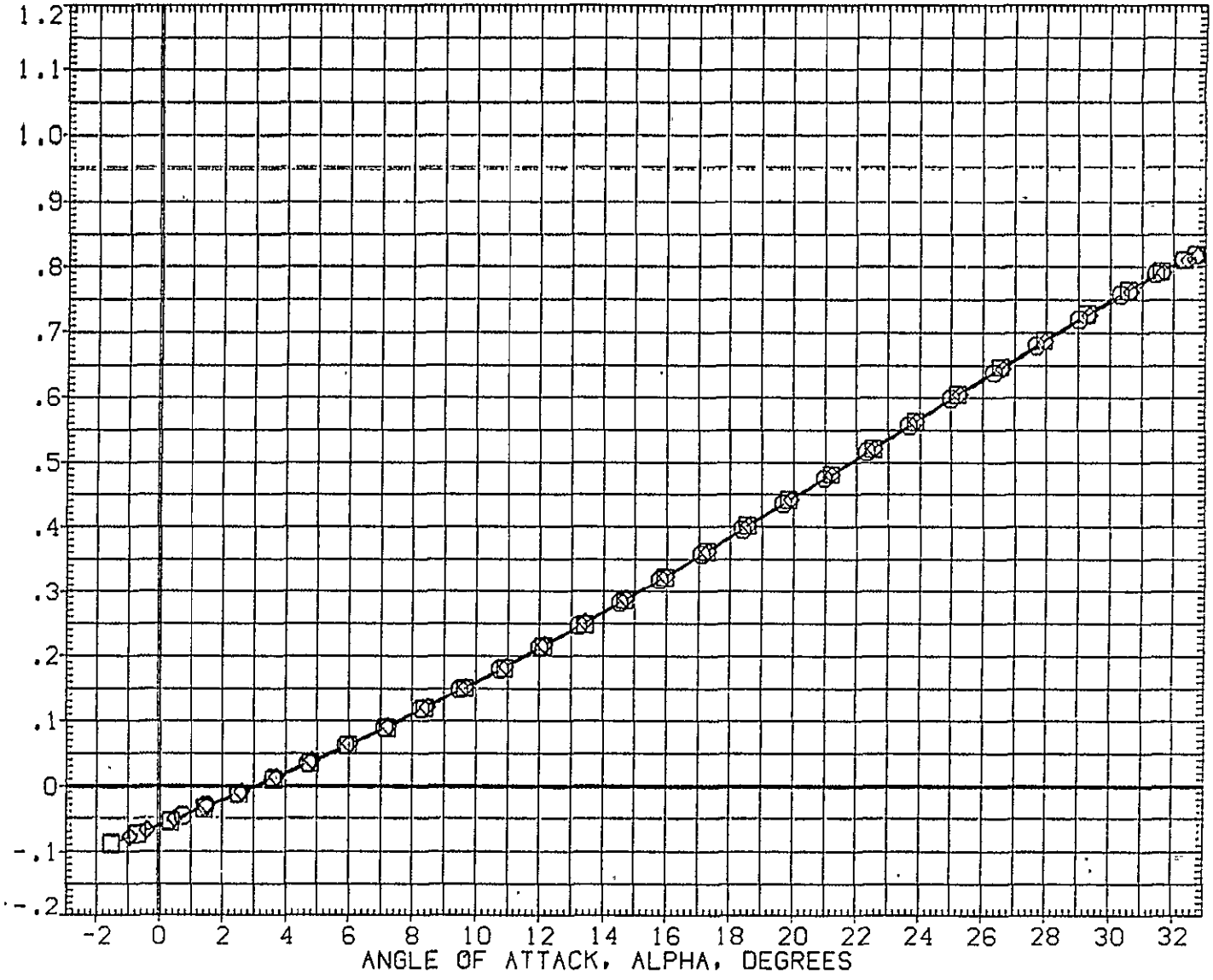


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	▢	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

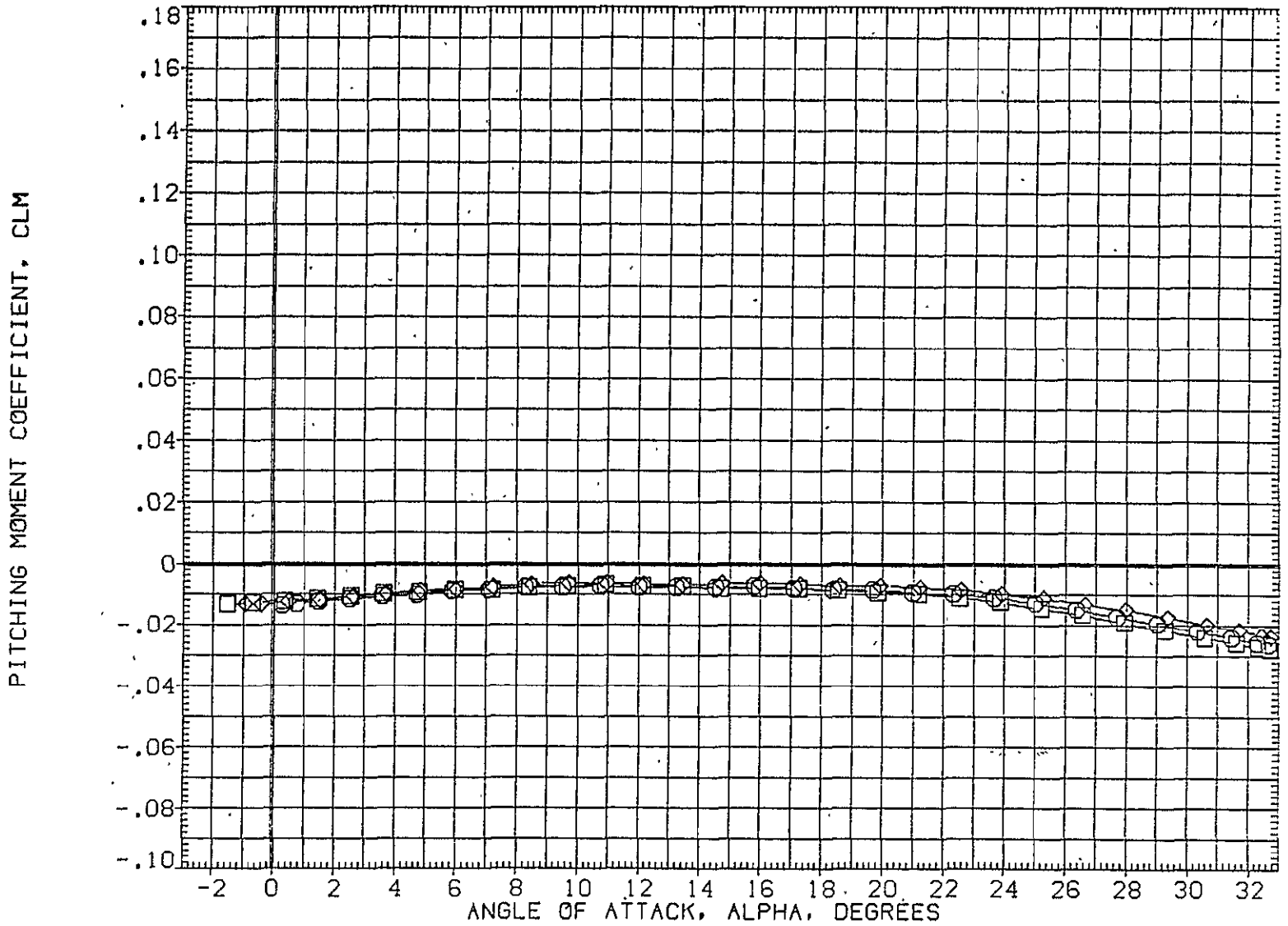


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

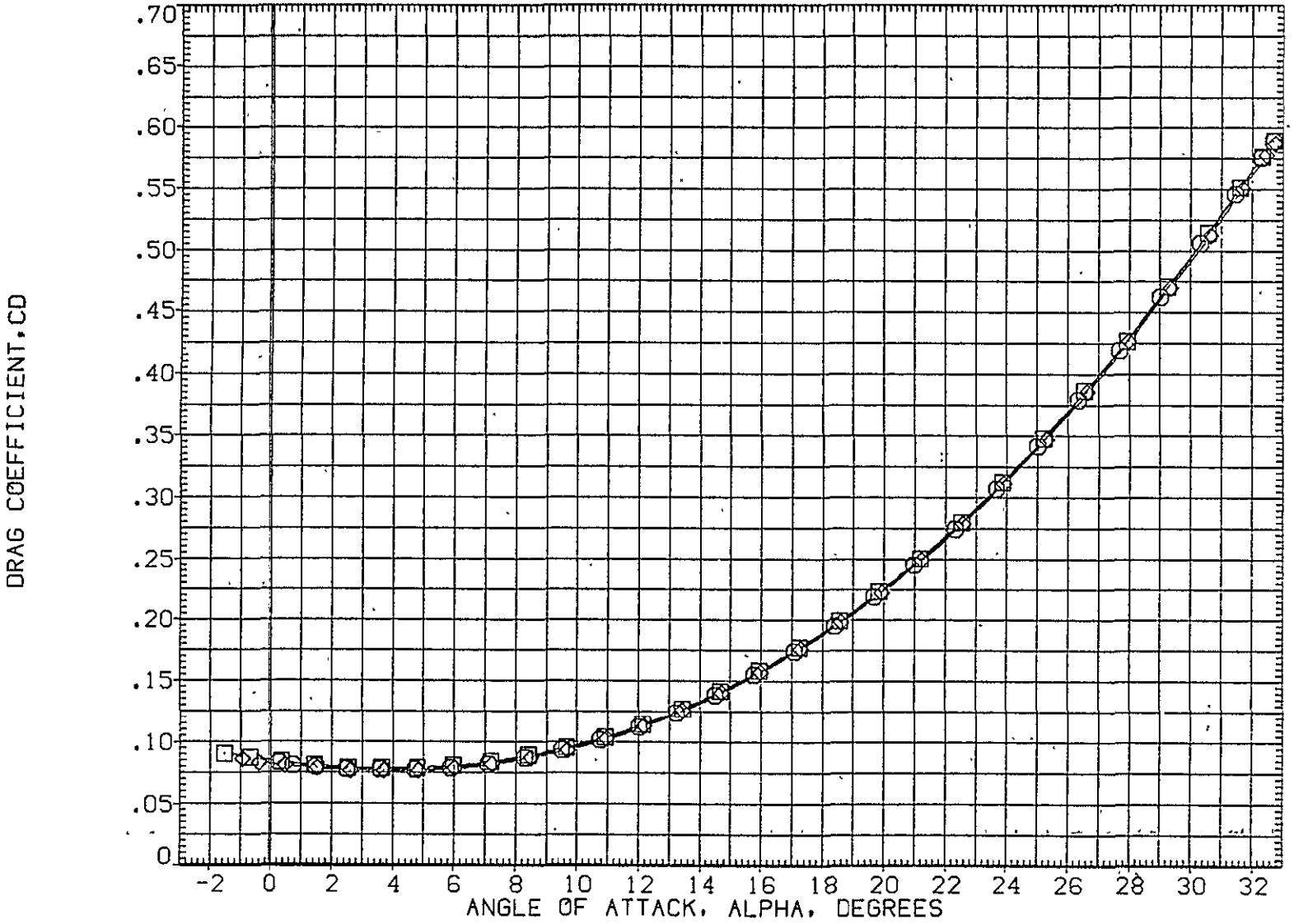


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

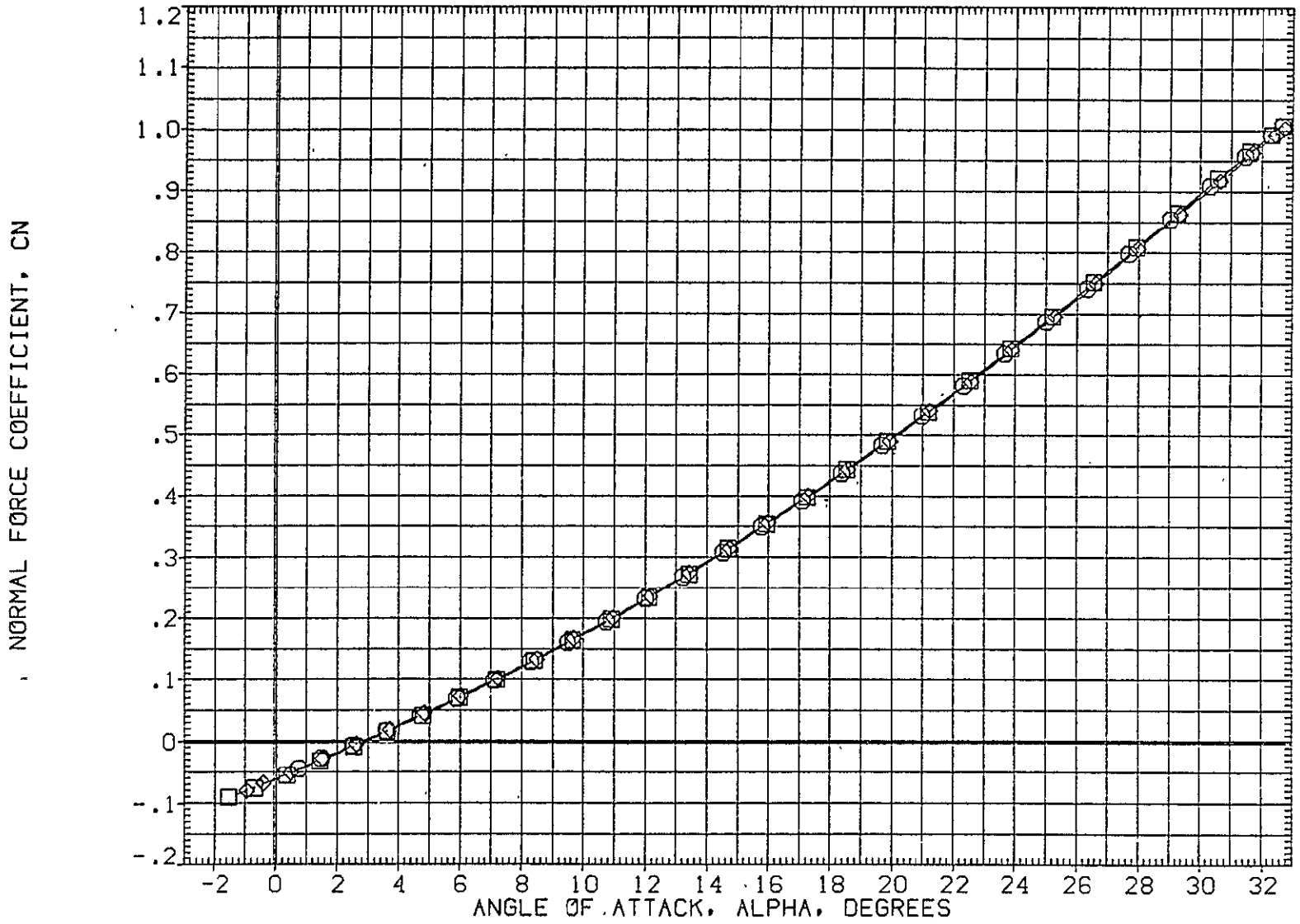


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

C.3

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	⊏□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

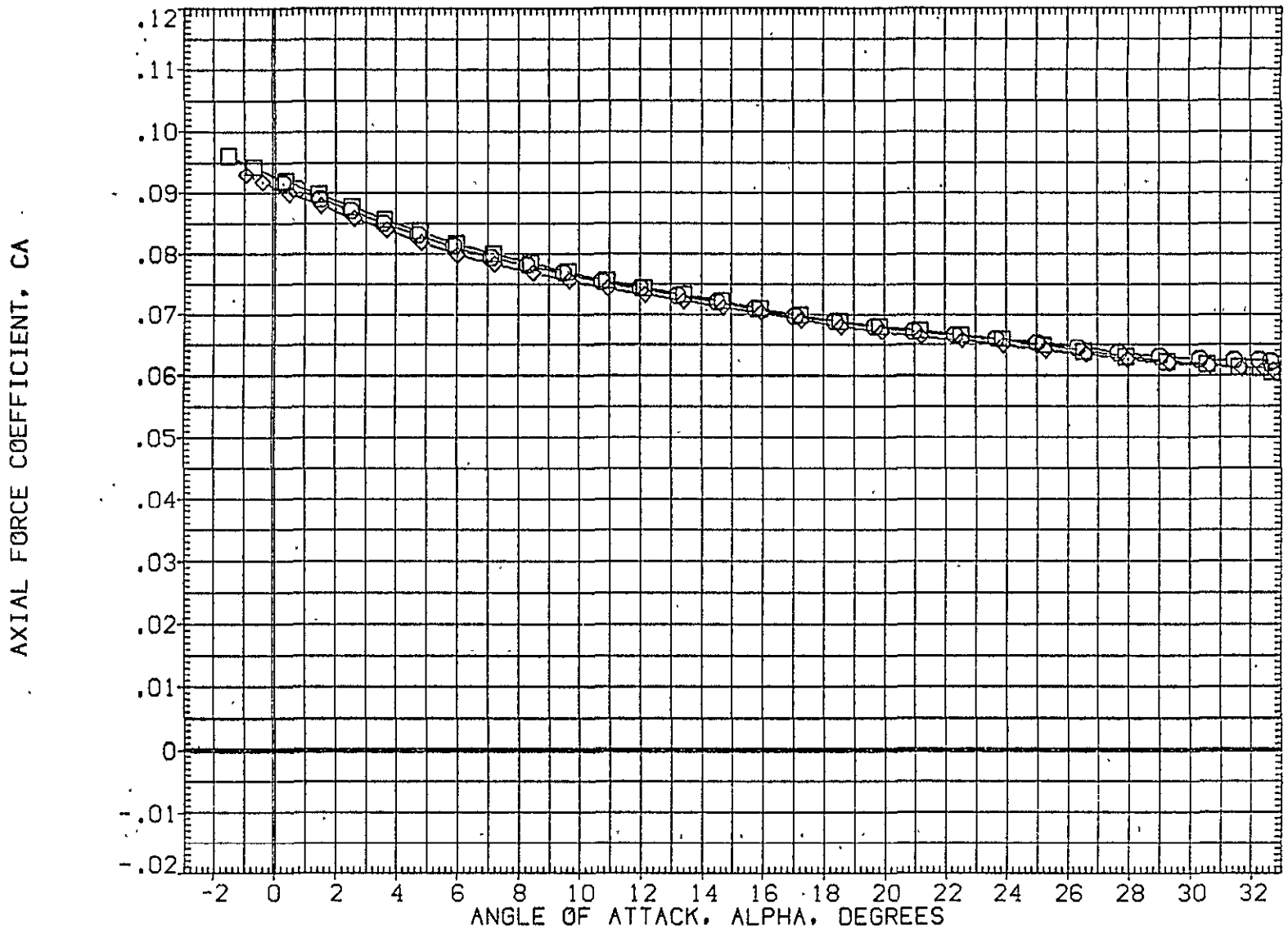


FIG 21 EFFECT OF GRIT (FLEVON= 0)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

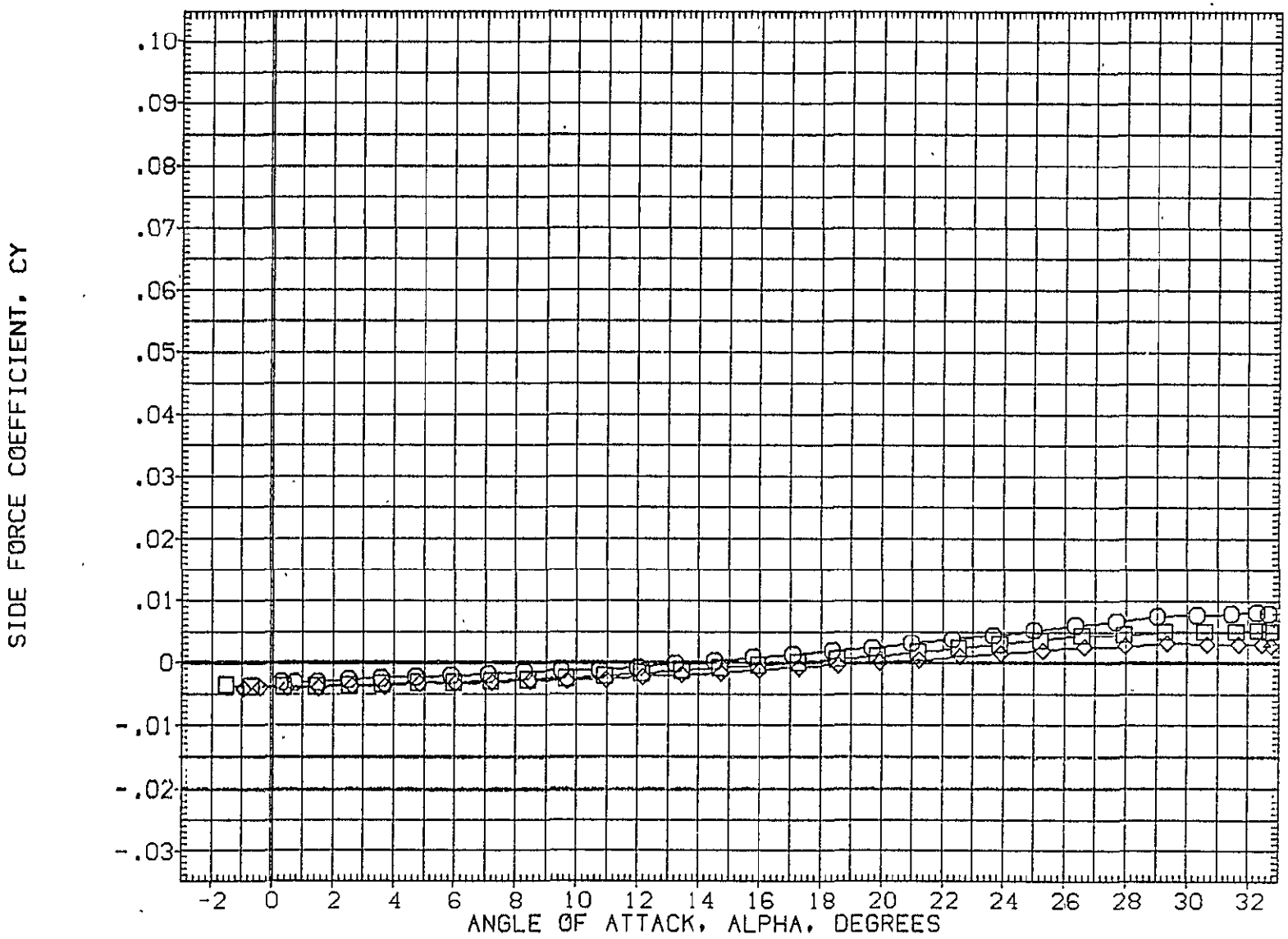


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

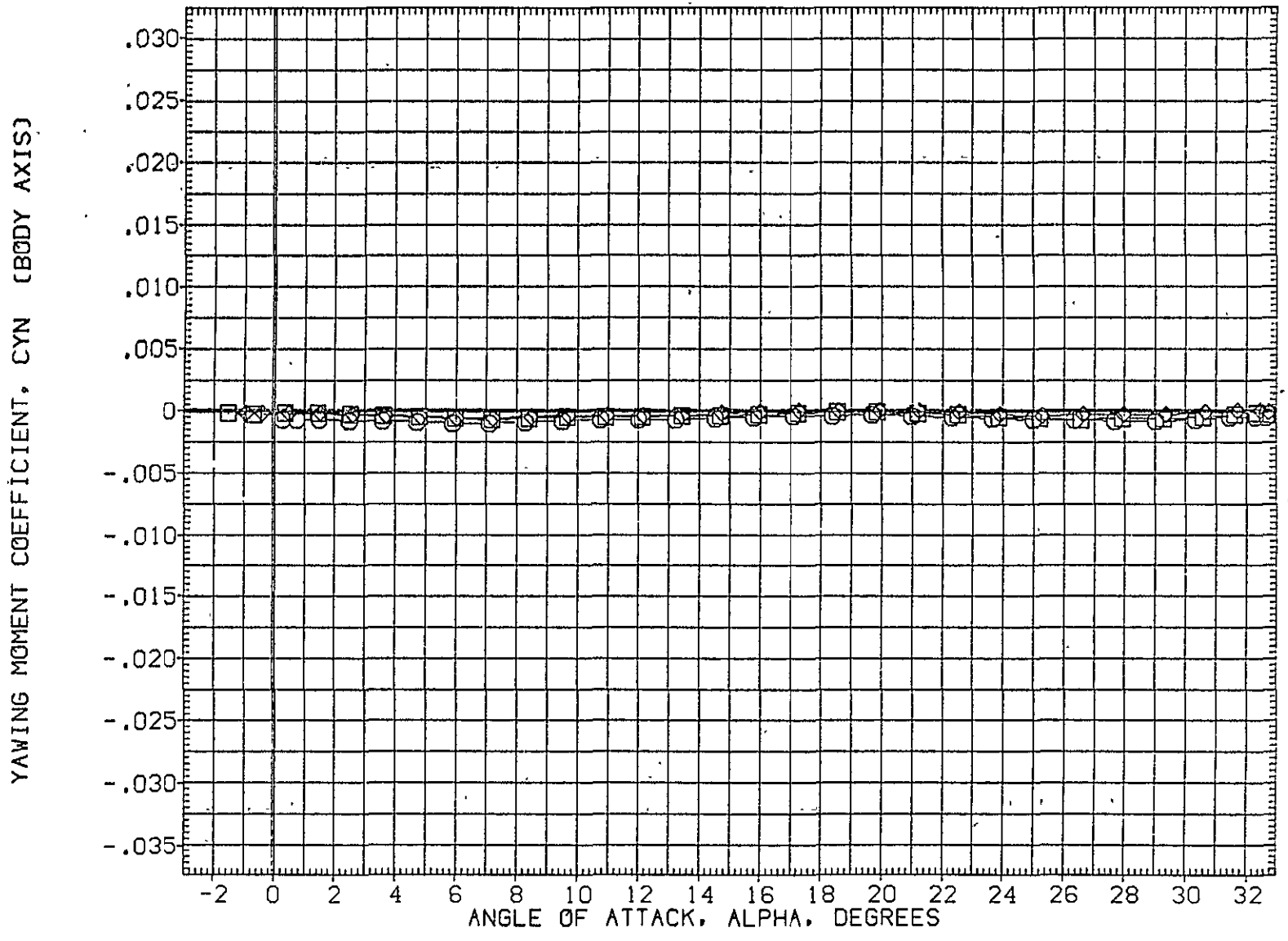


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

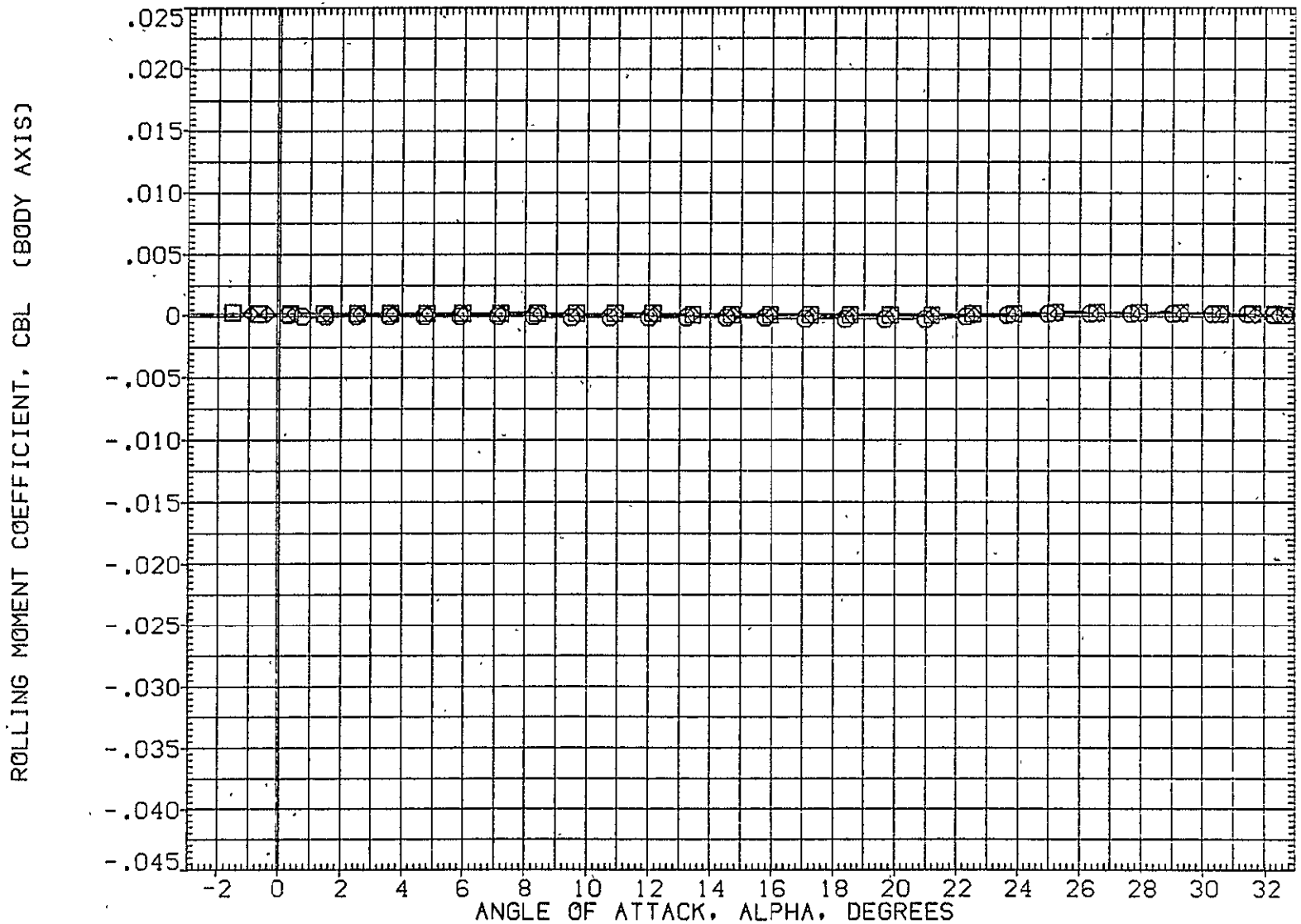


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY014)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	.000
(RHY007)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	25.000	25.000
(RHY019)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

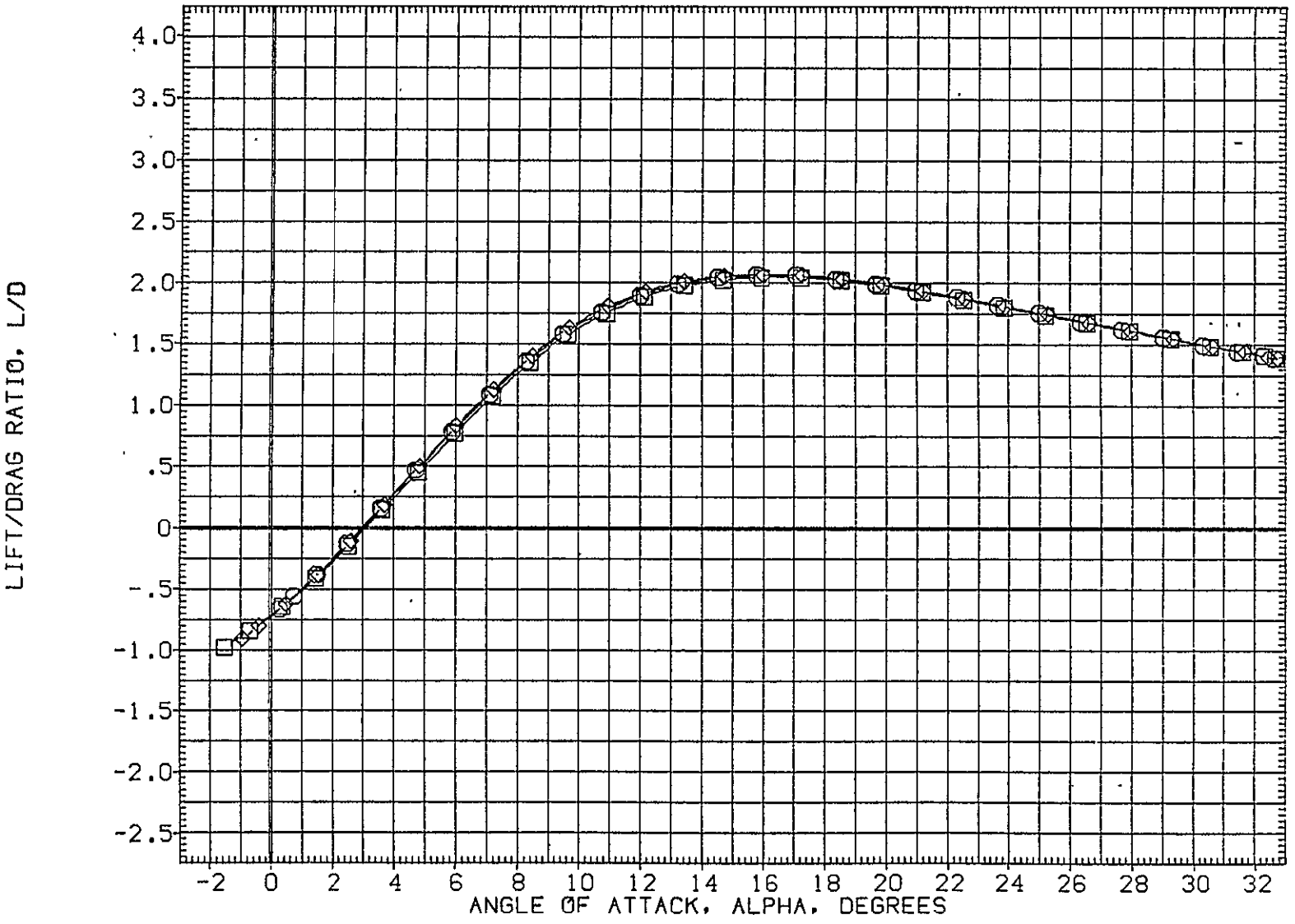


FIG 21 EFFECT OF GRIT (ELEVON= 0)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

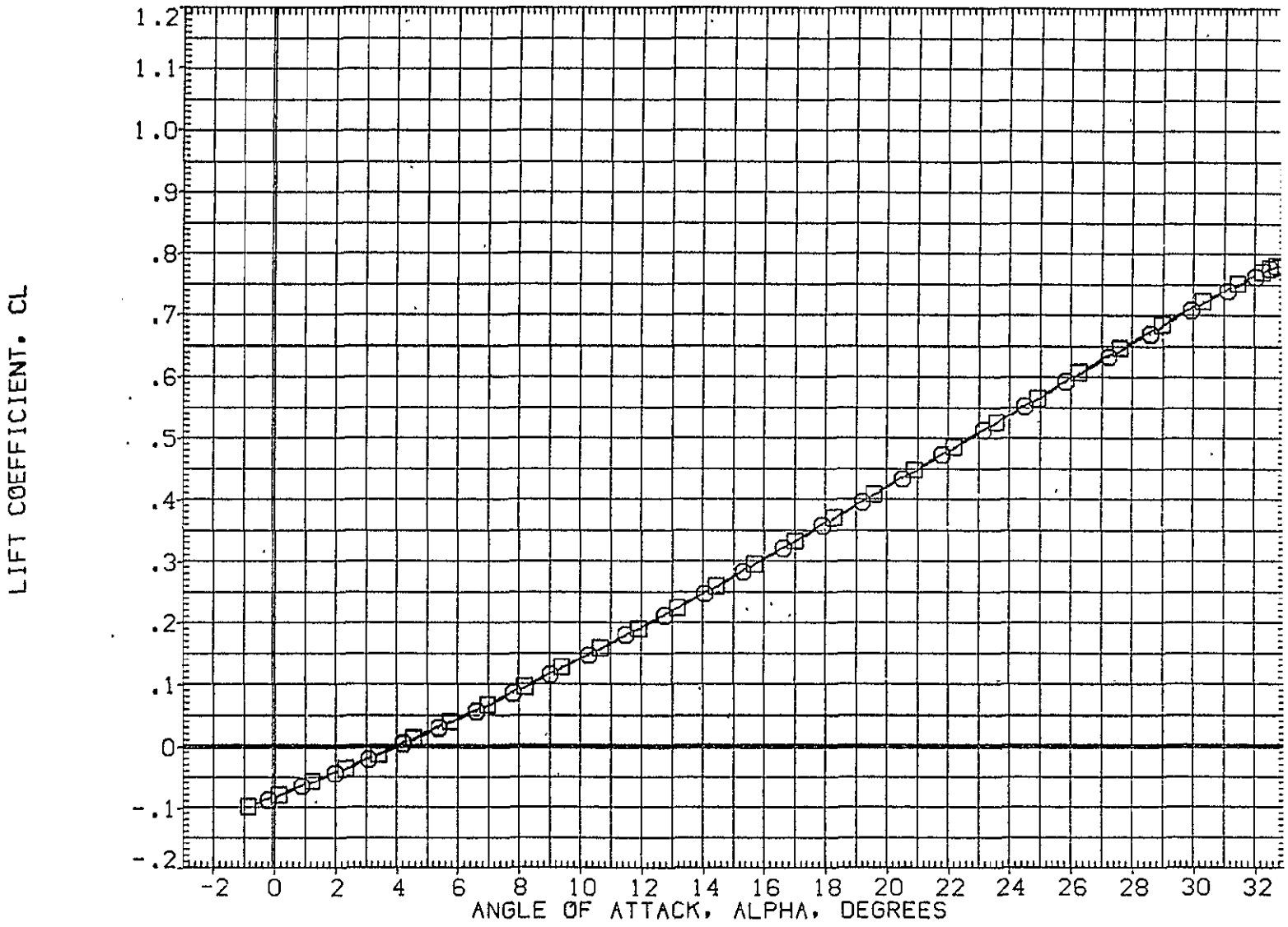


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	⊡	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000
(RHY044)	⊟	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1078.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

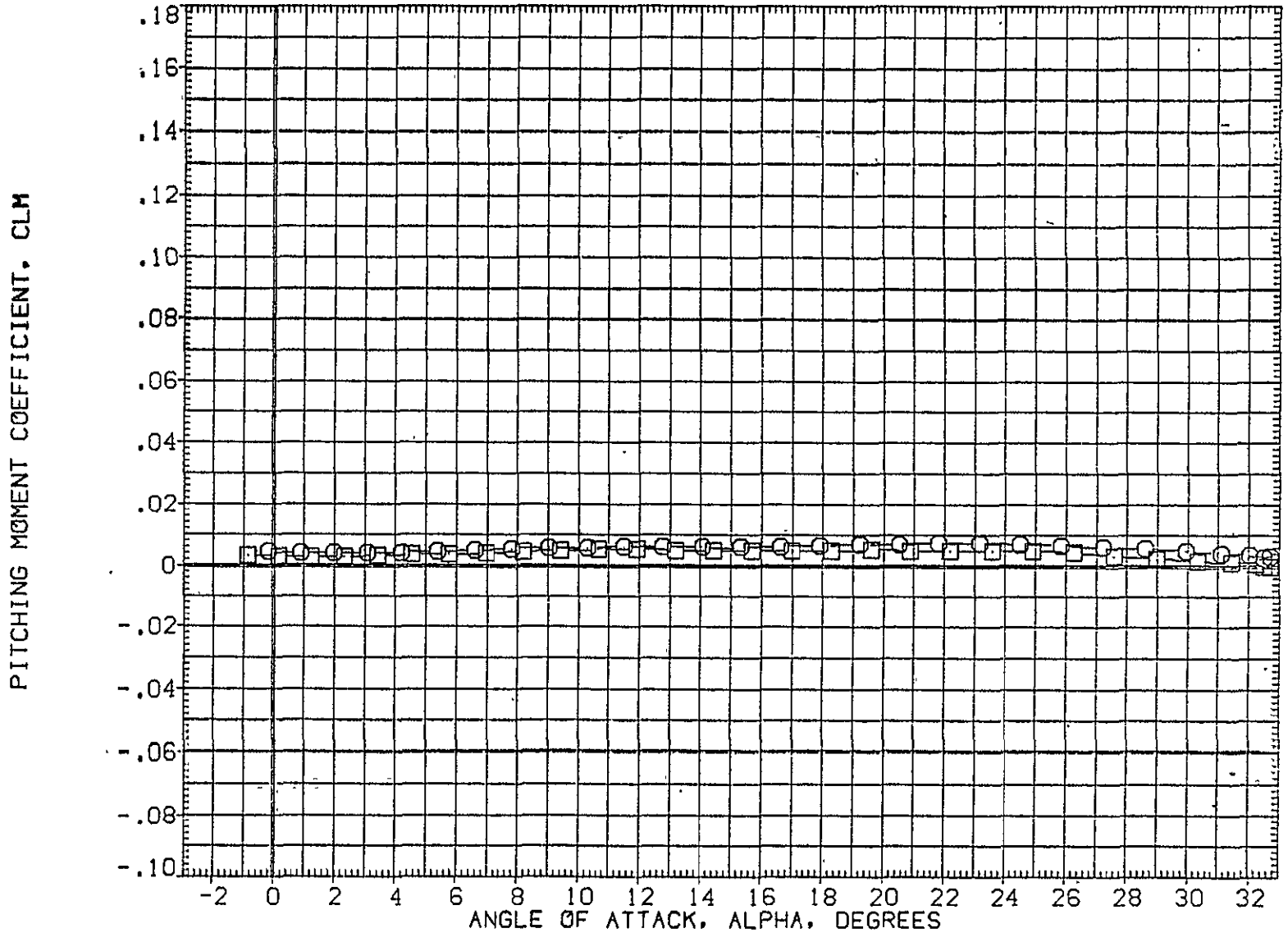


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	8	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

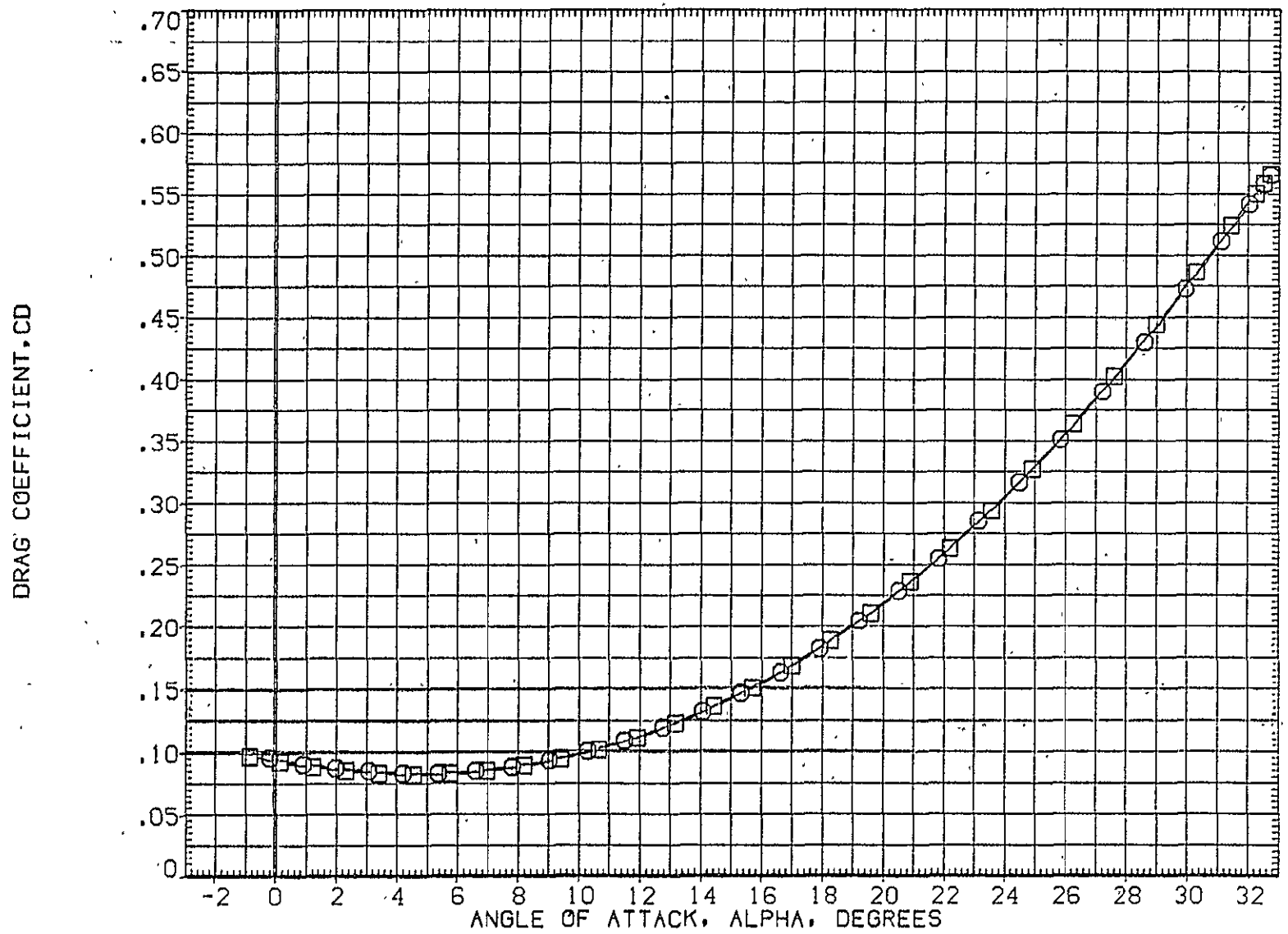


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

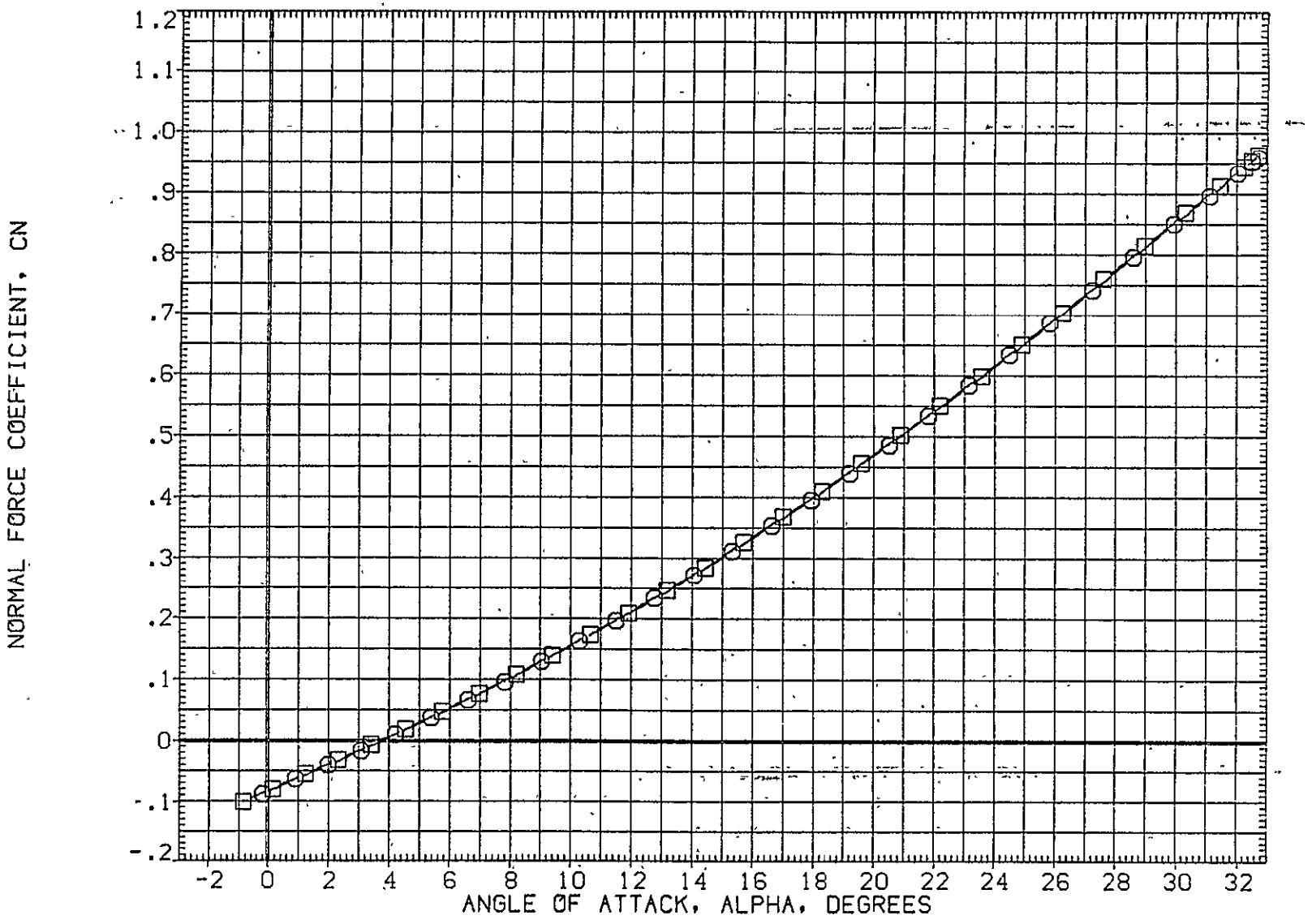


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

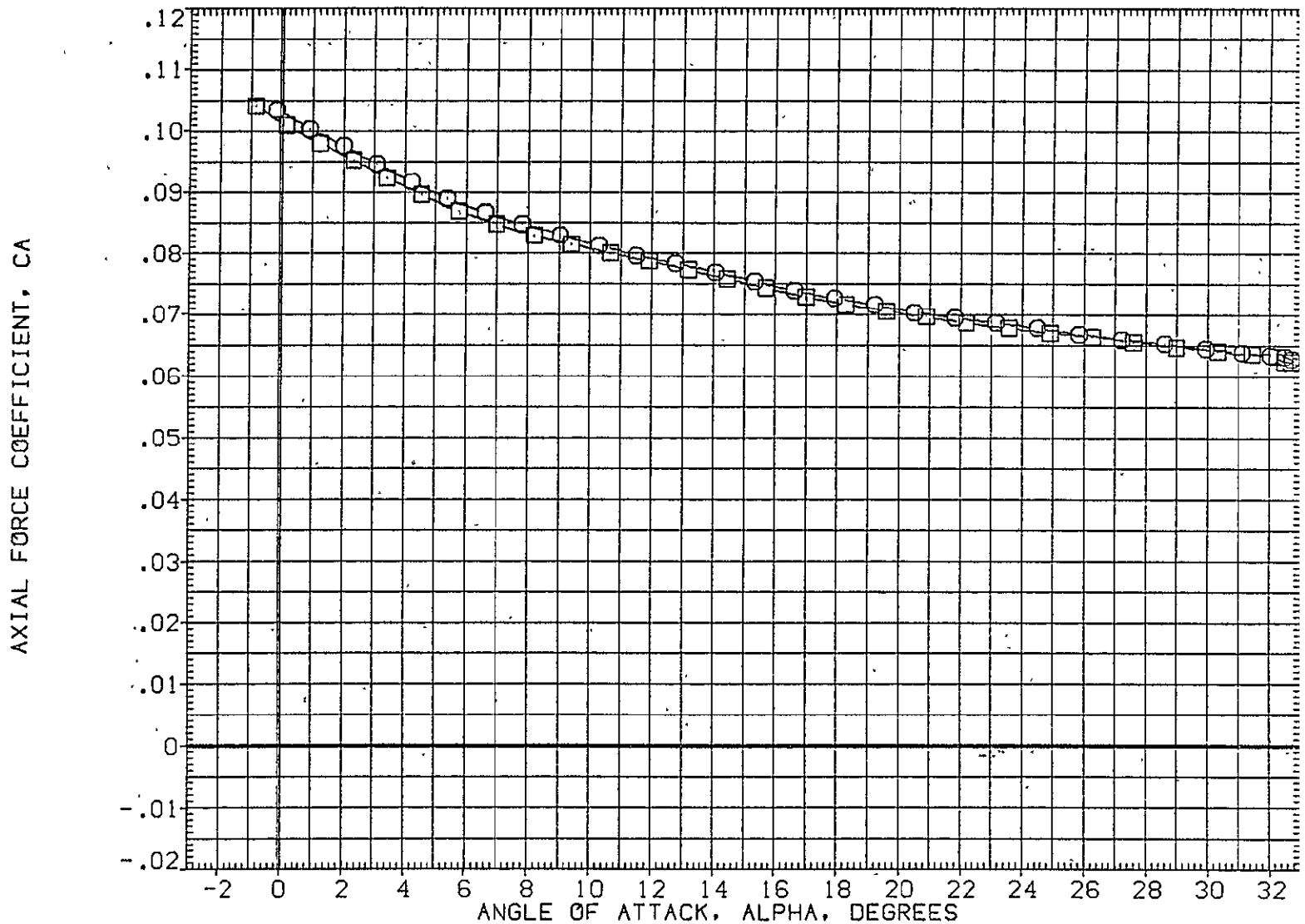


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

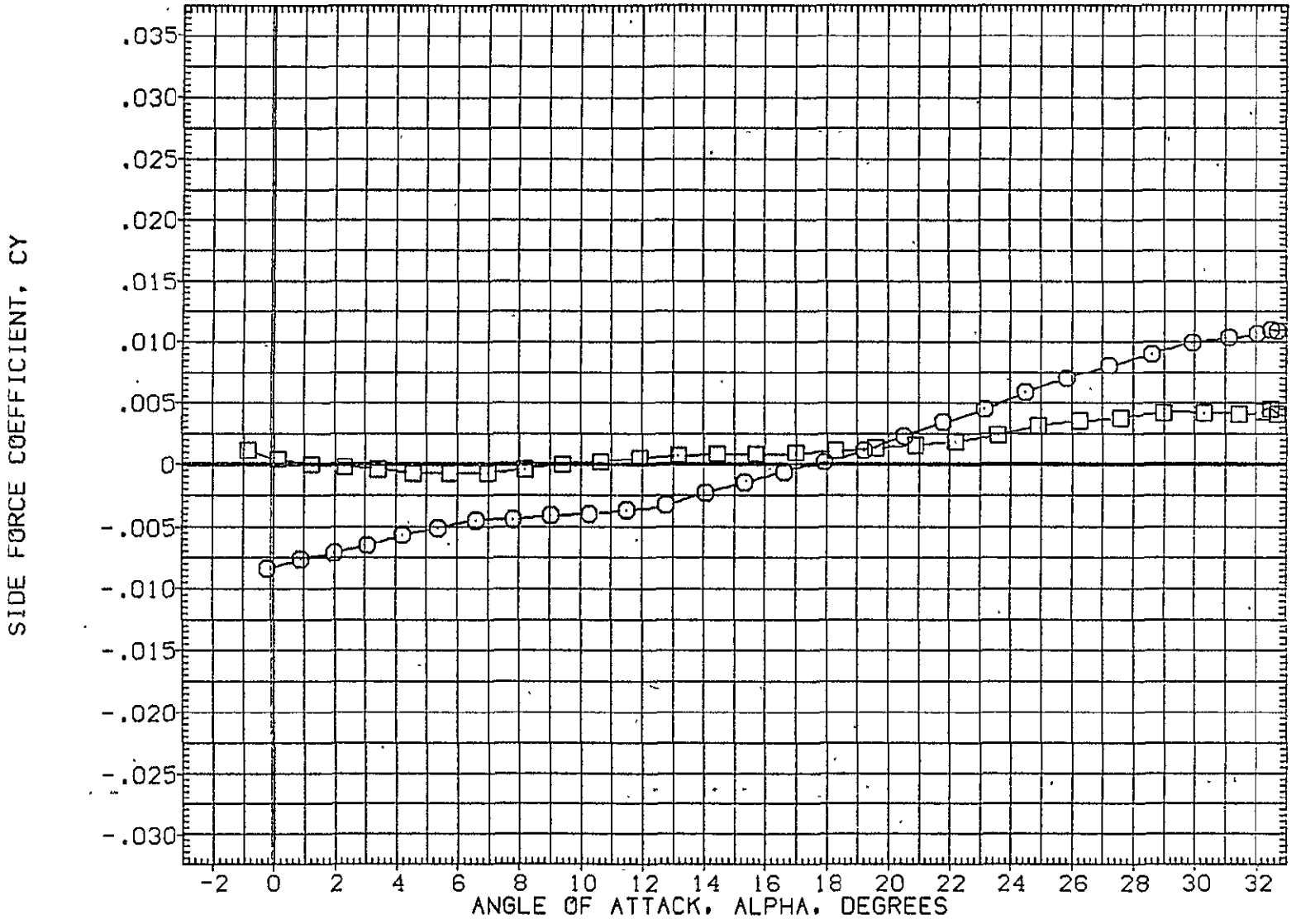


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

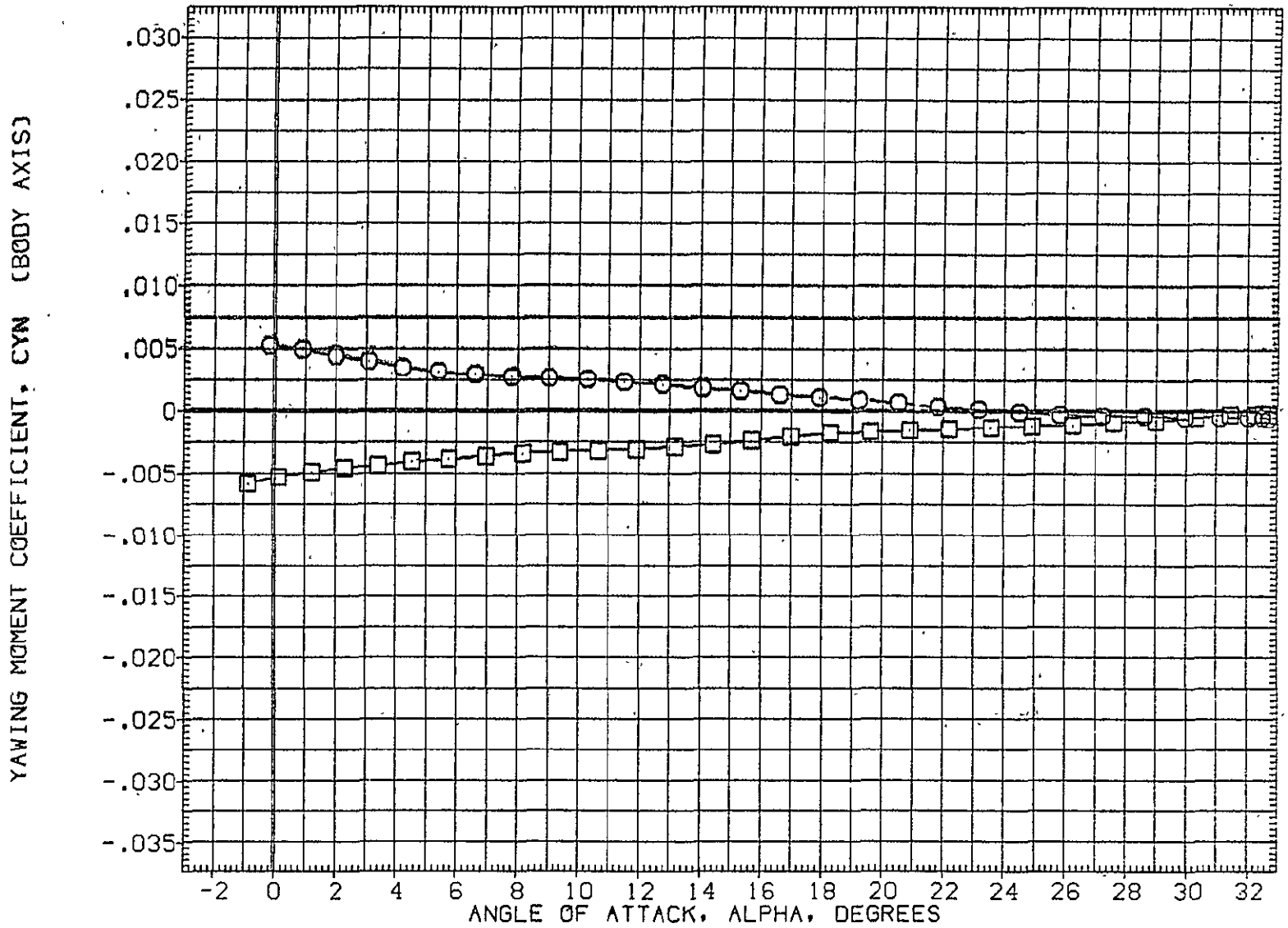


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

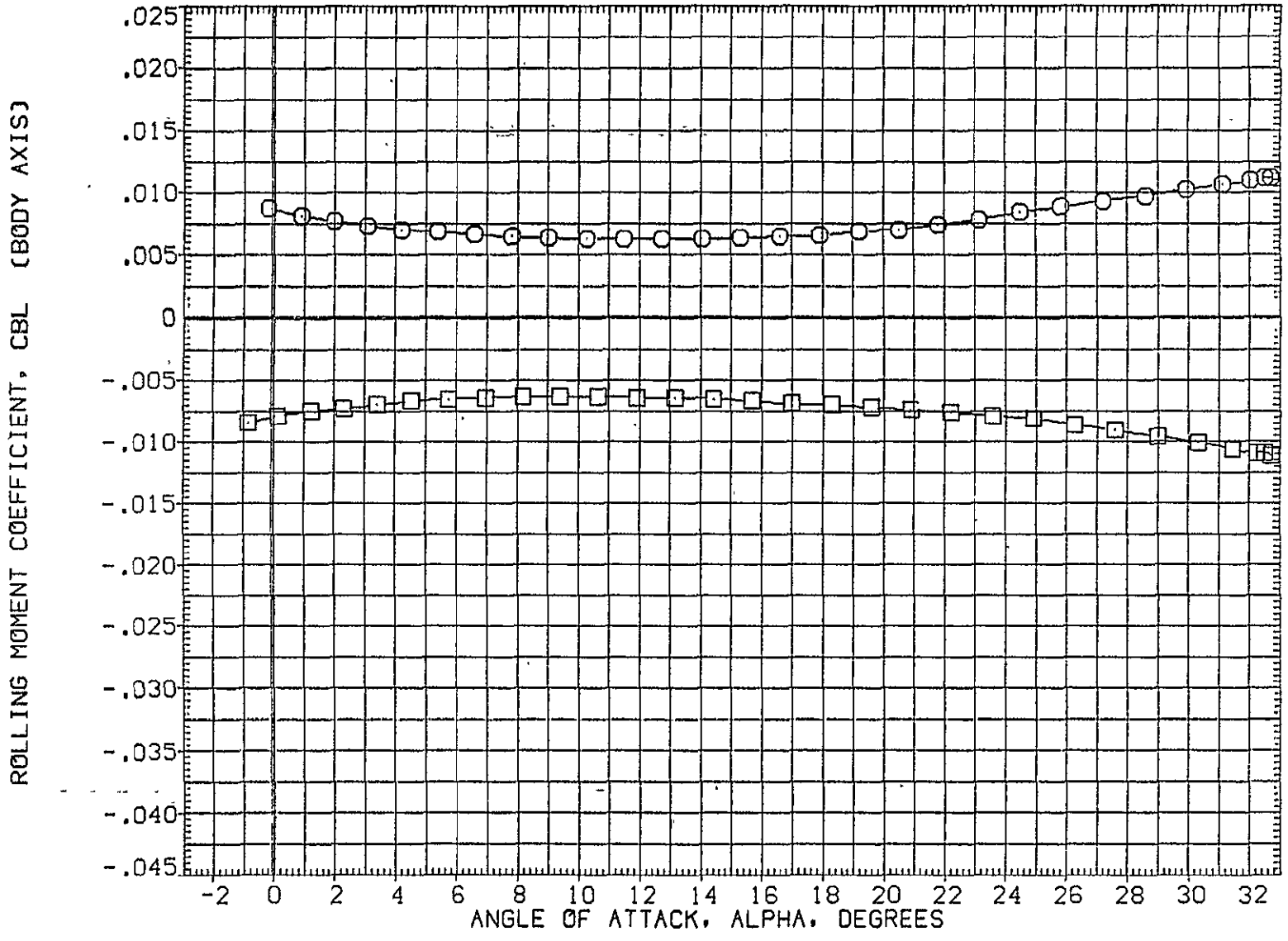


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY030)	⊗	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY044)	⊡	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATIO		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

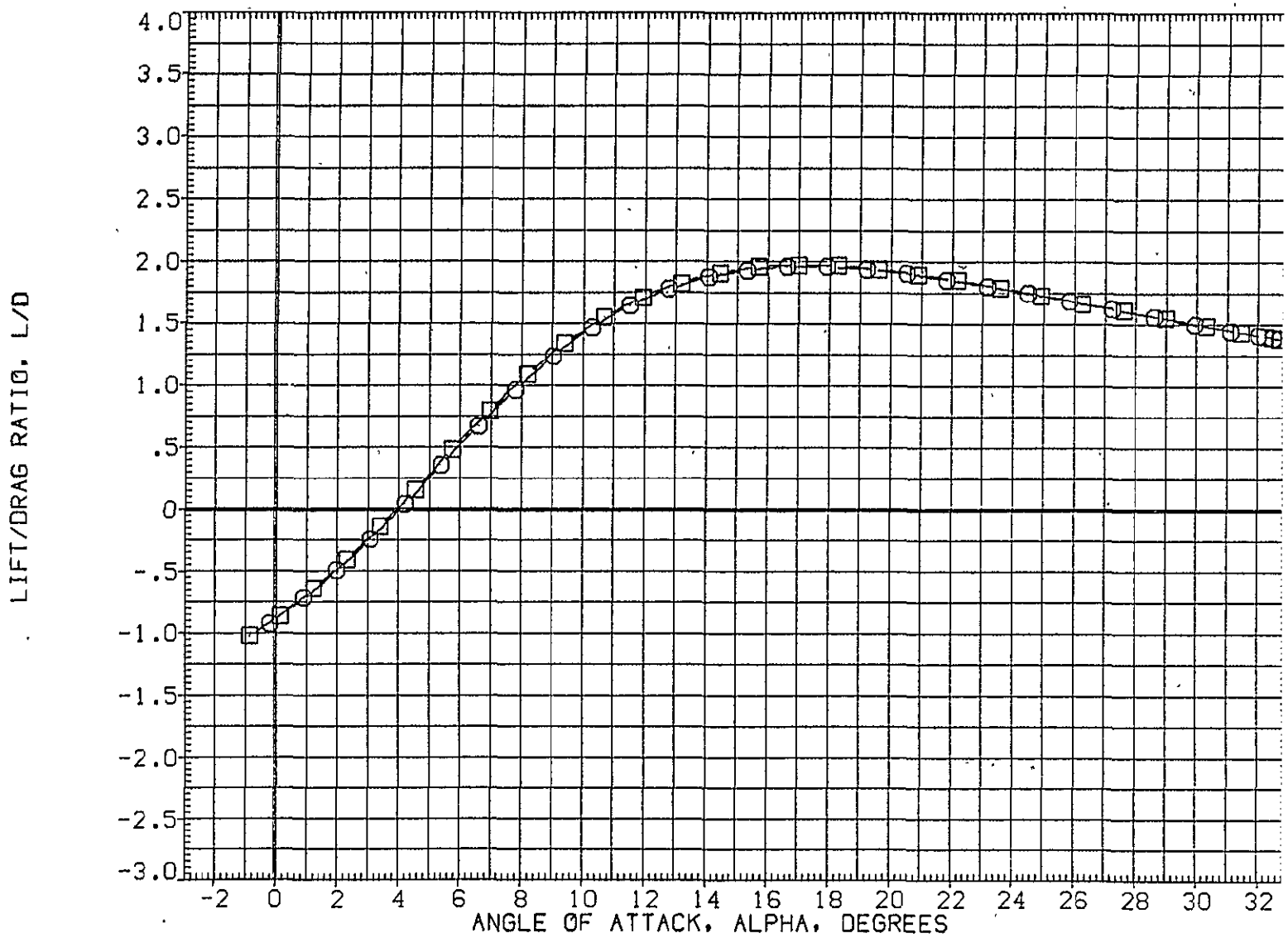


FIG 22 EFFECT OF CONTROL SETTING (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

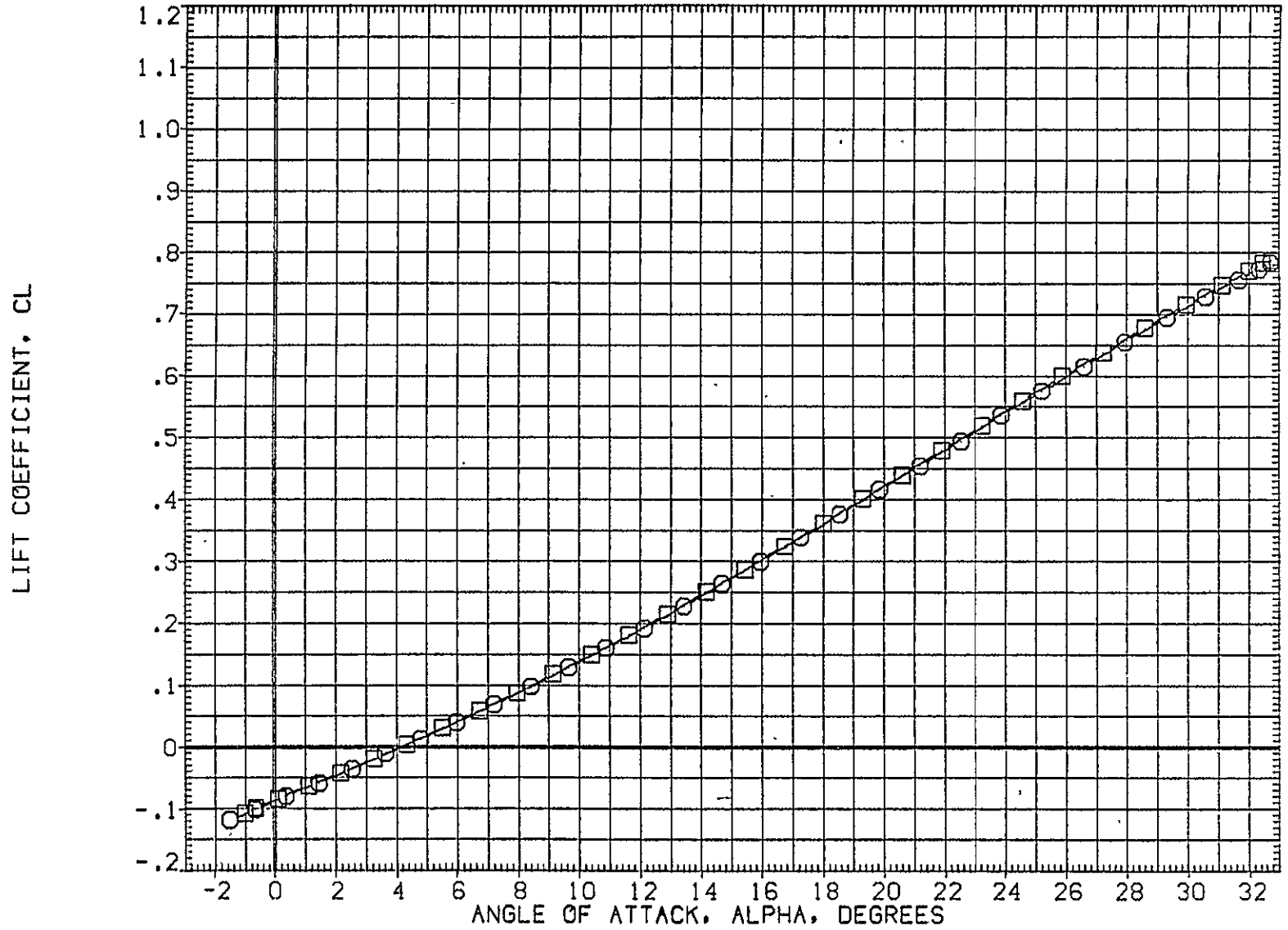


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATI		
SREF	2690.0000	S
LREF	474.8100	I
BREF	936.6800	I
XMRP	1076.7000	I
YMRP	.0000	I
ZMRP	375.0000	I
SCALE	.0150	

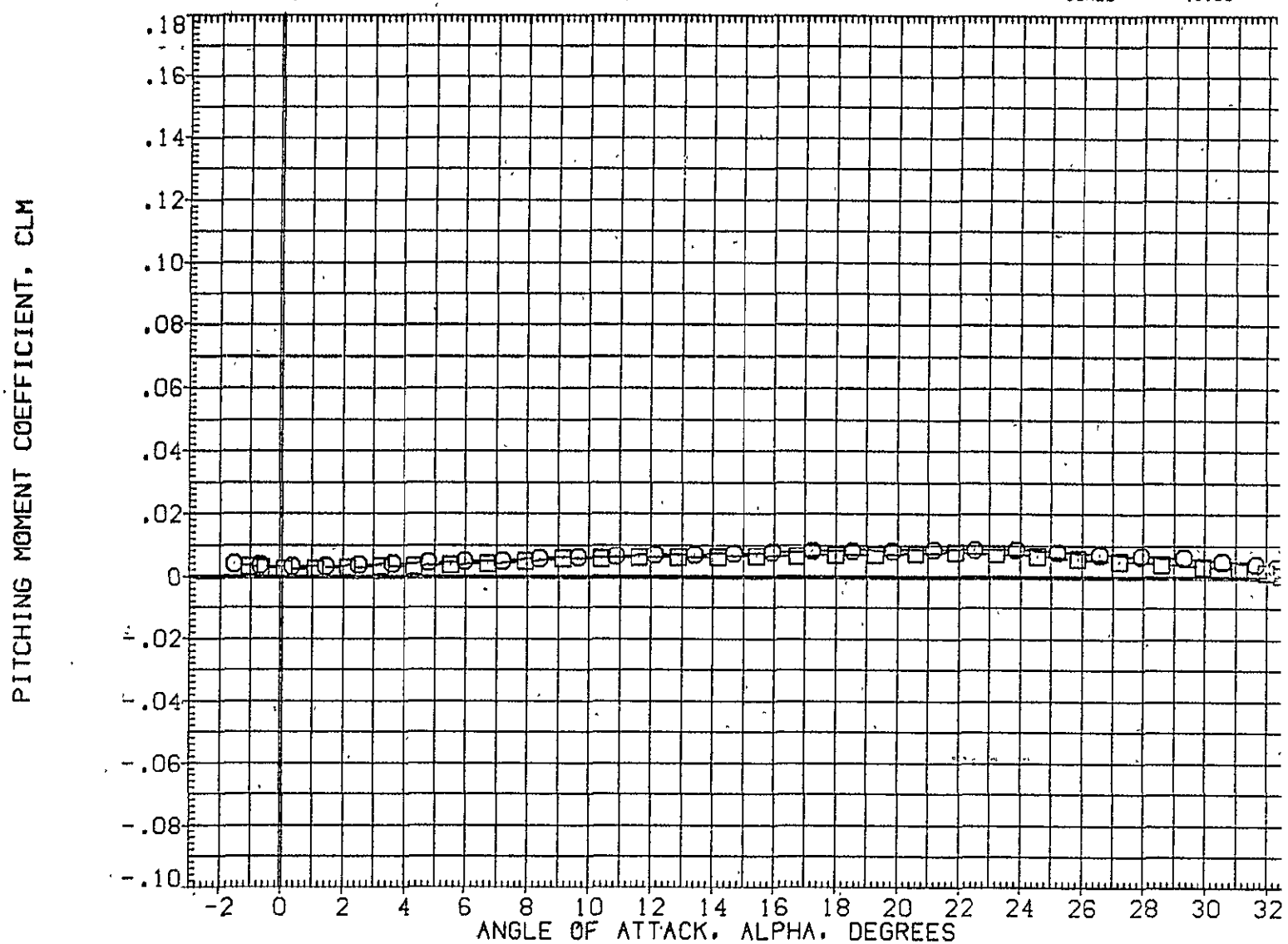


FIG 23. EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

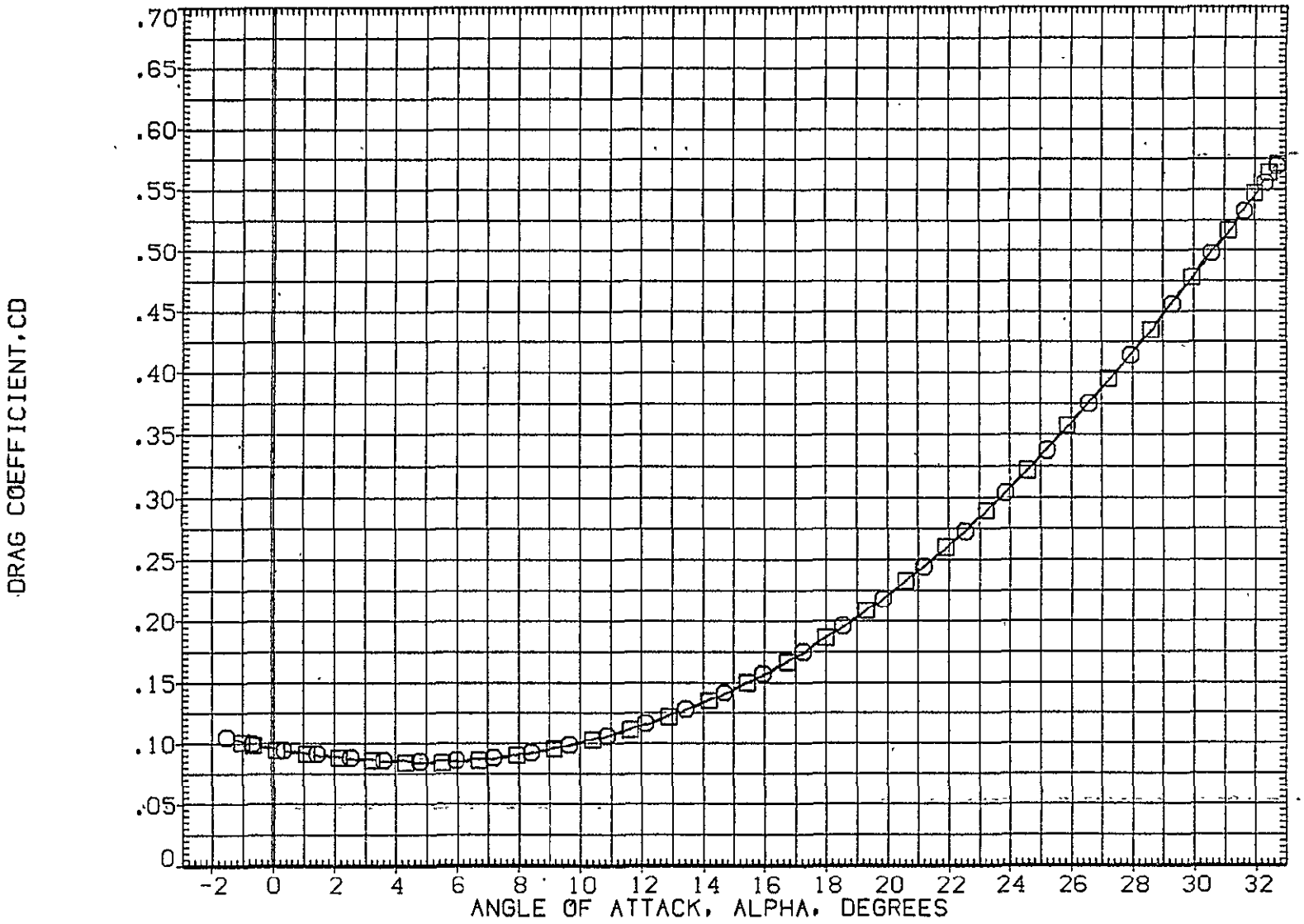


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

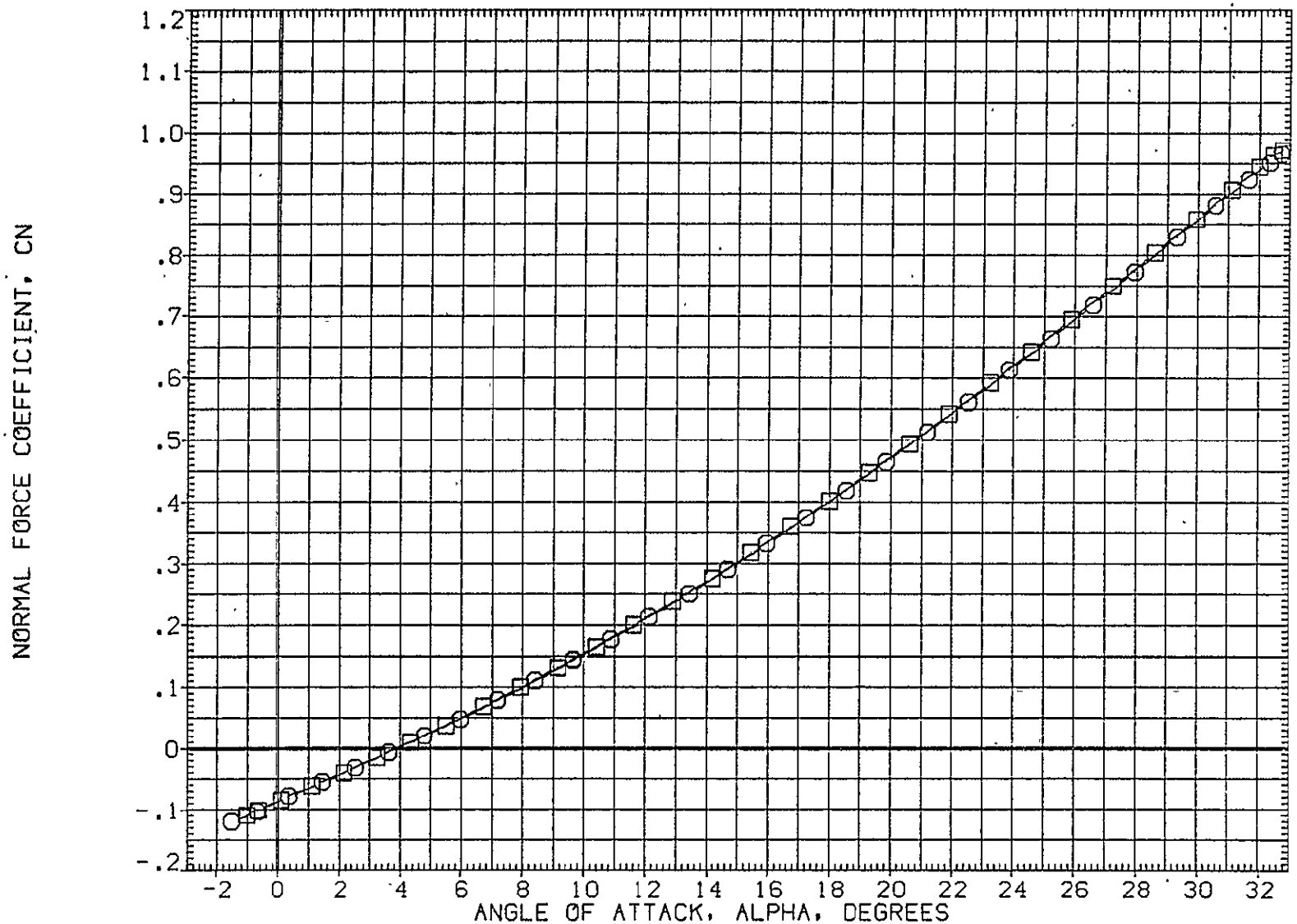


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

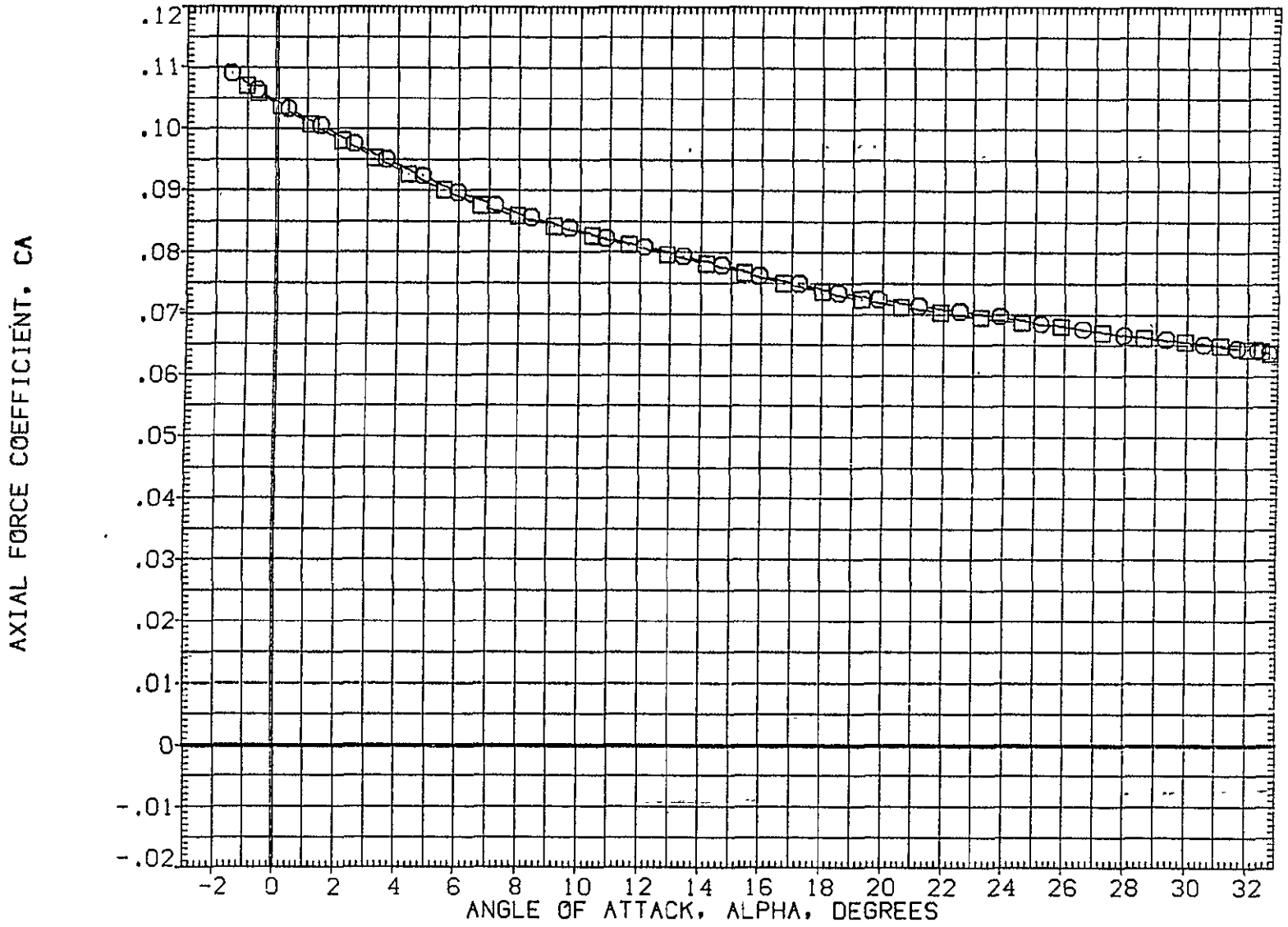


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

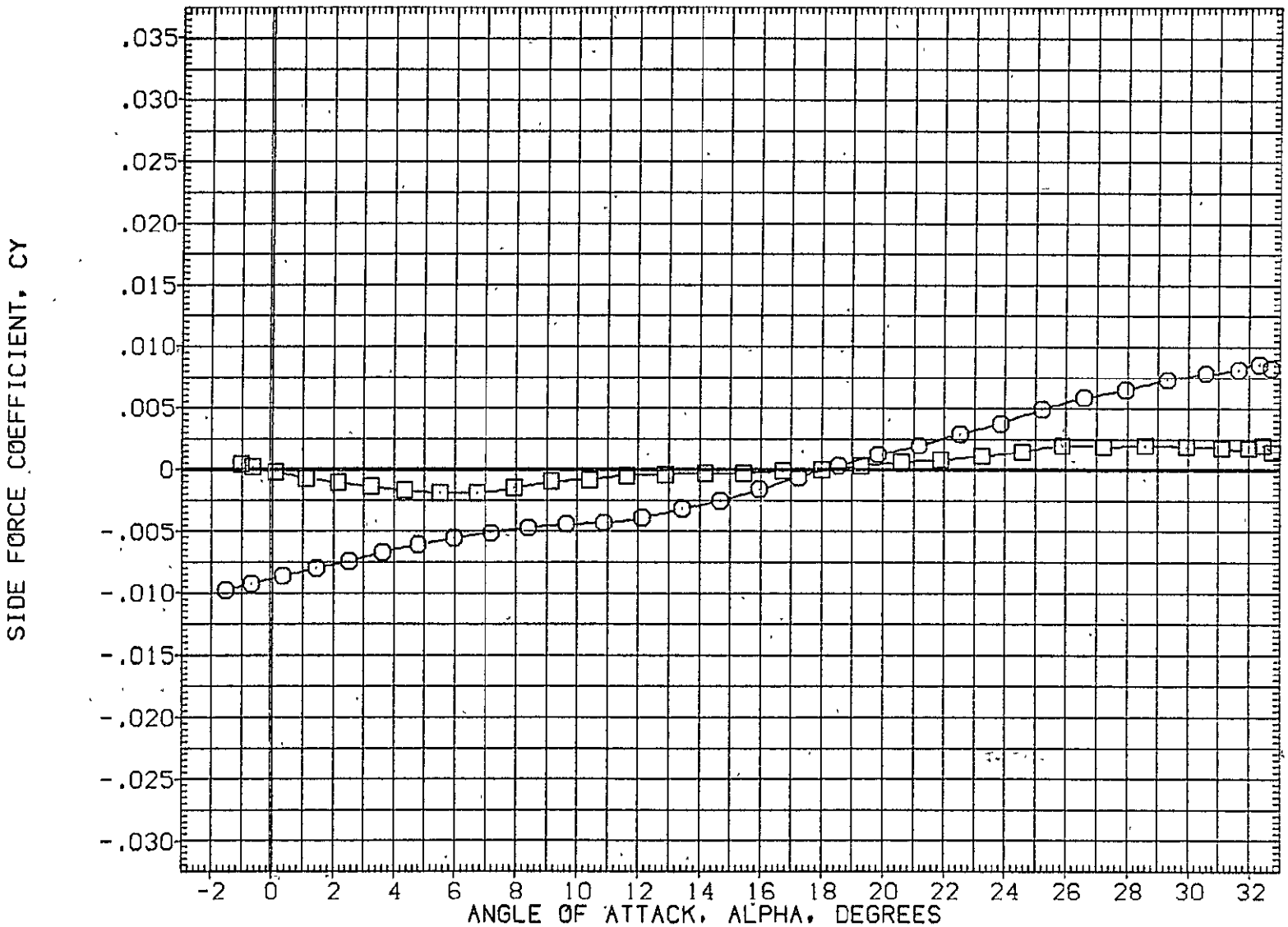


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

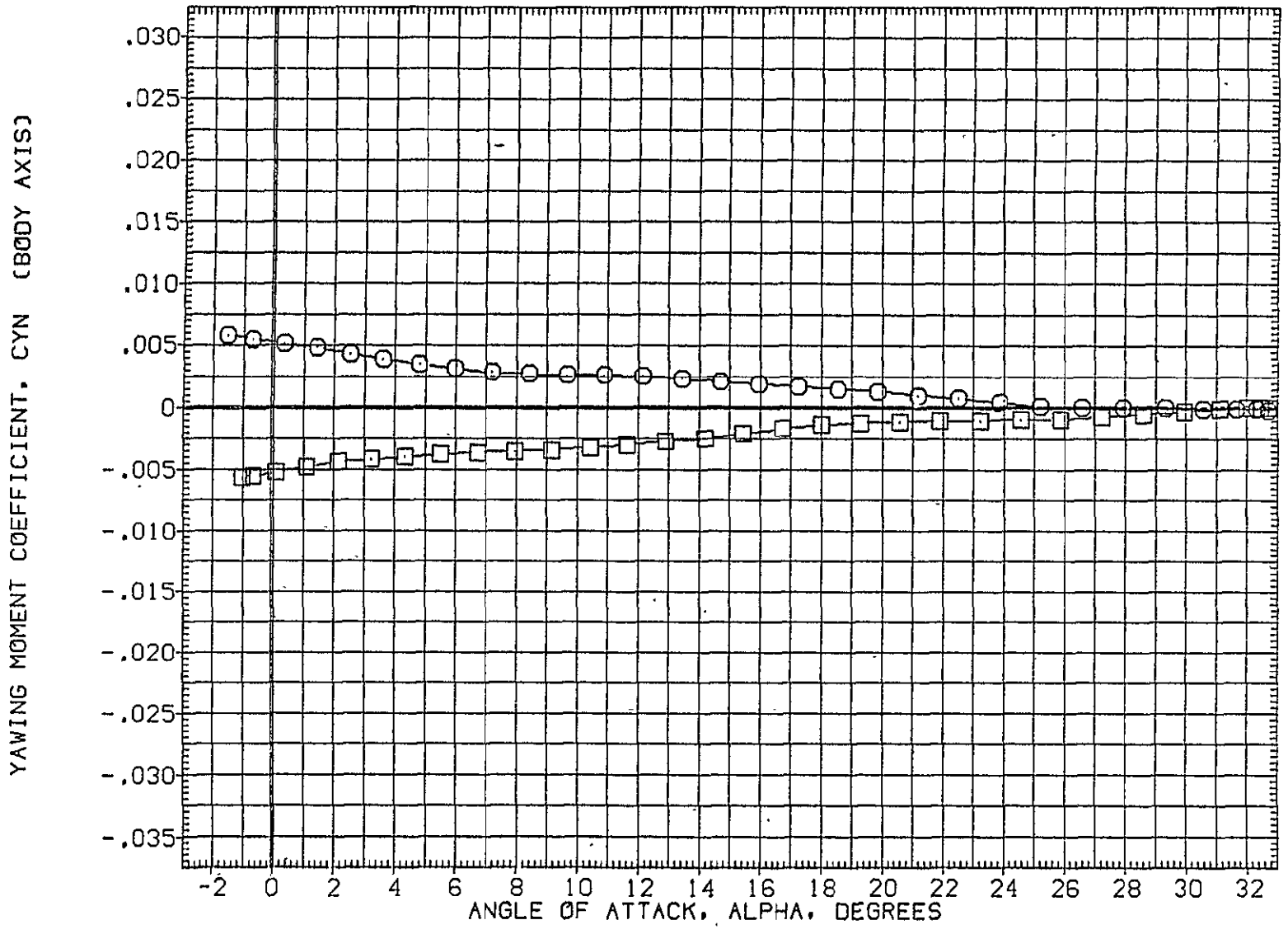


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000
(RHY038)	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

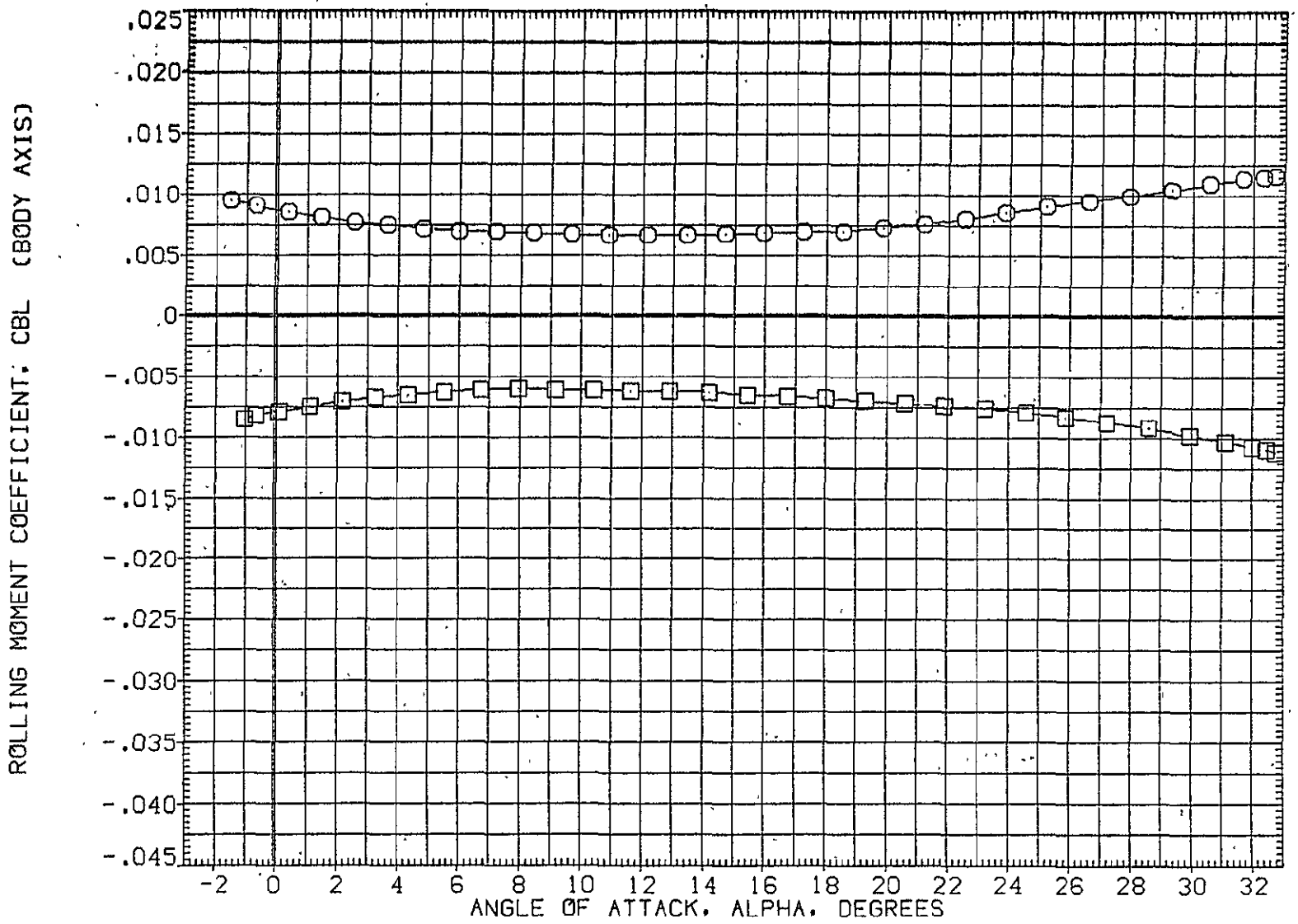


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY023) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY038) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

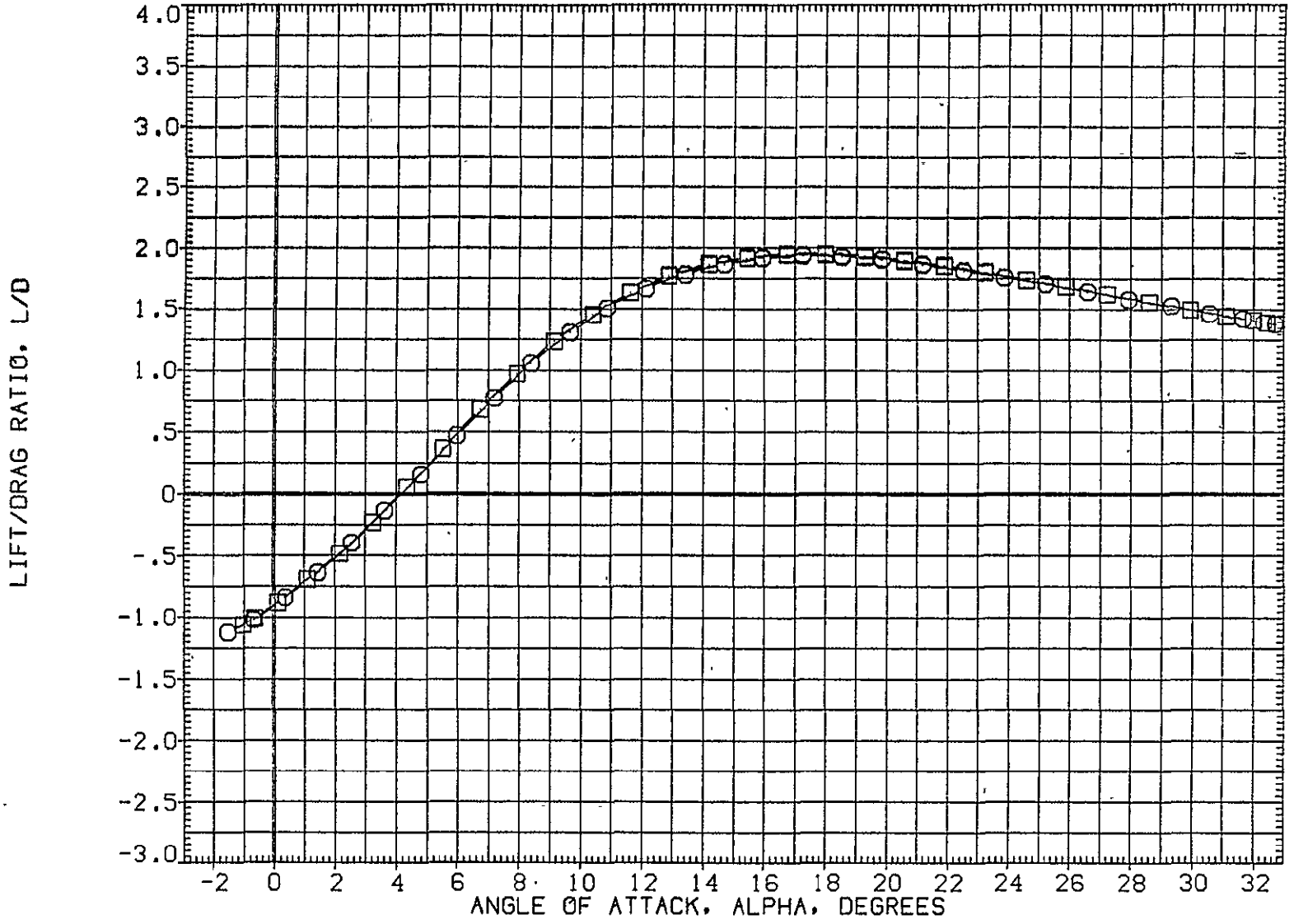


FIG 23 EFFECT OF CONTROL SETTING (GRIT ON BOTH WINGS)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

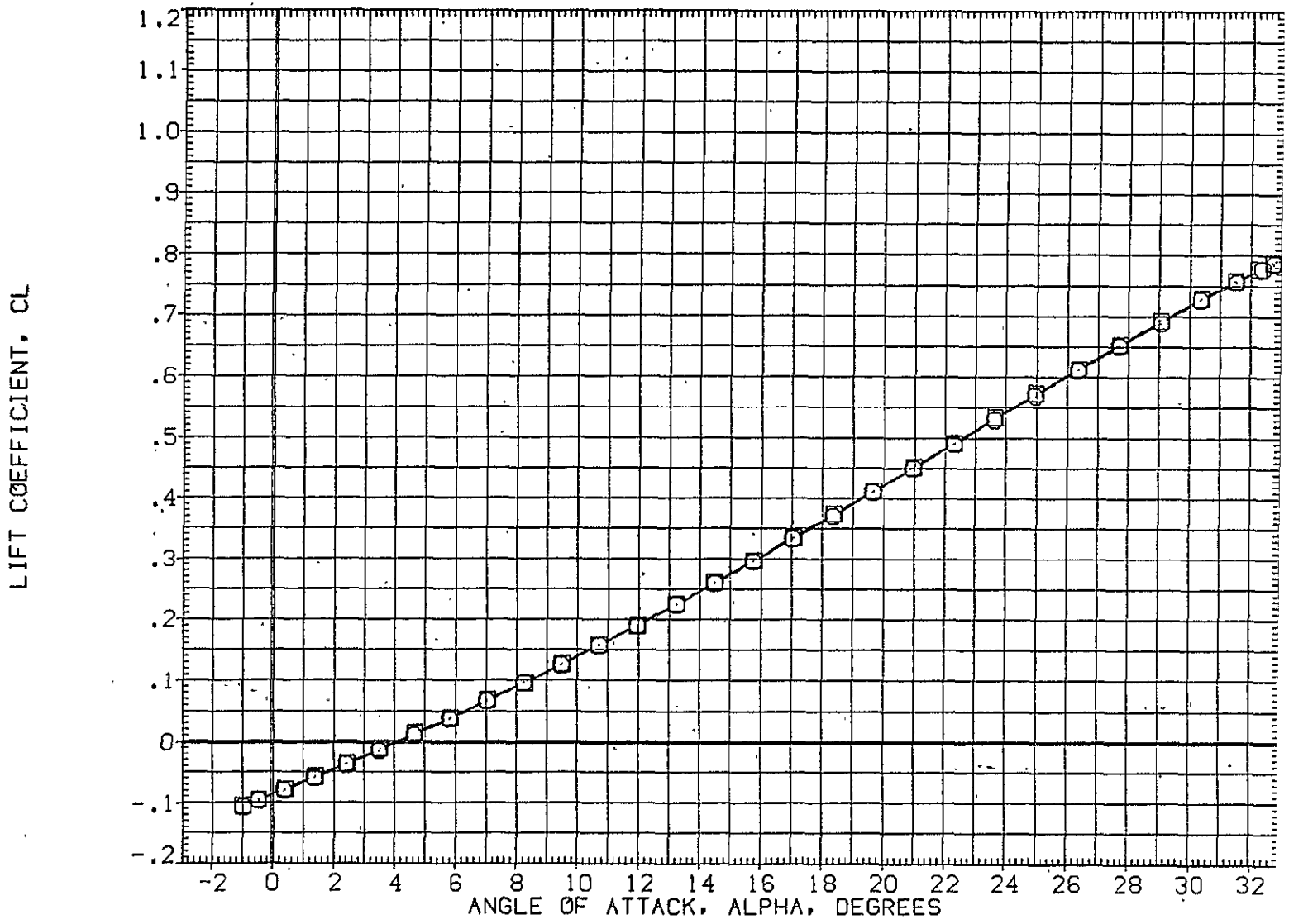


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

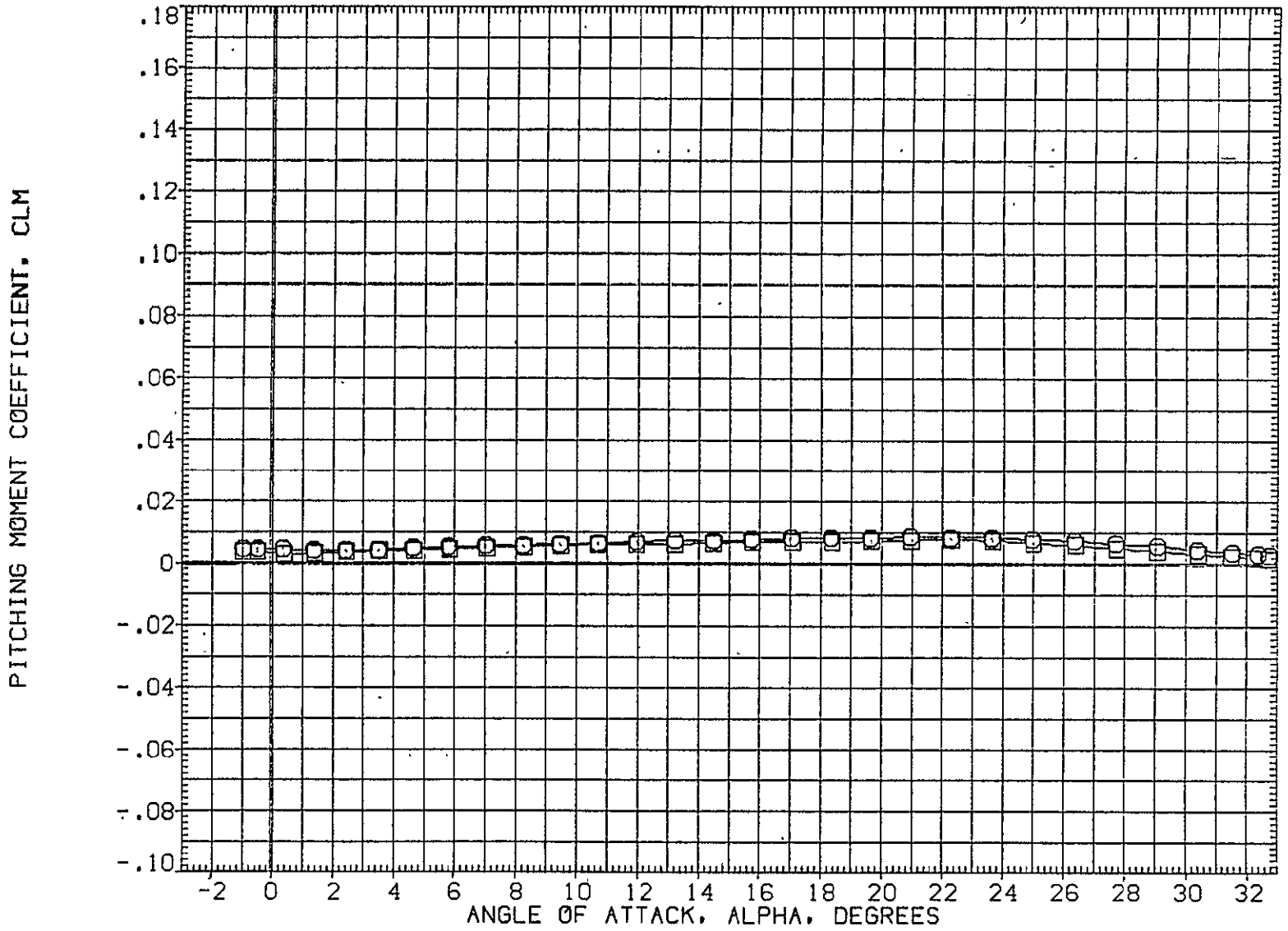


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

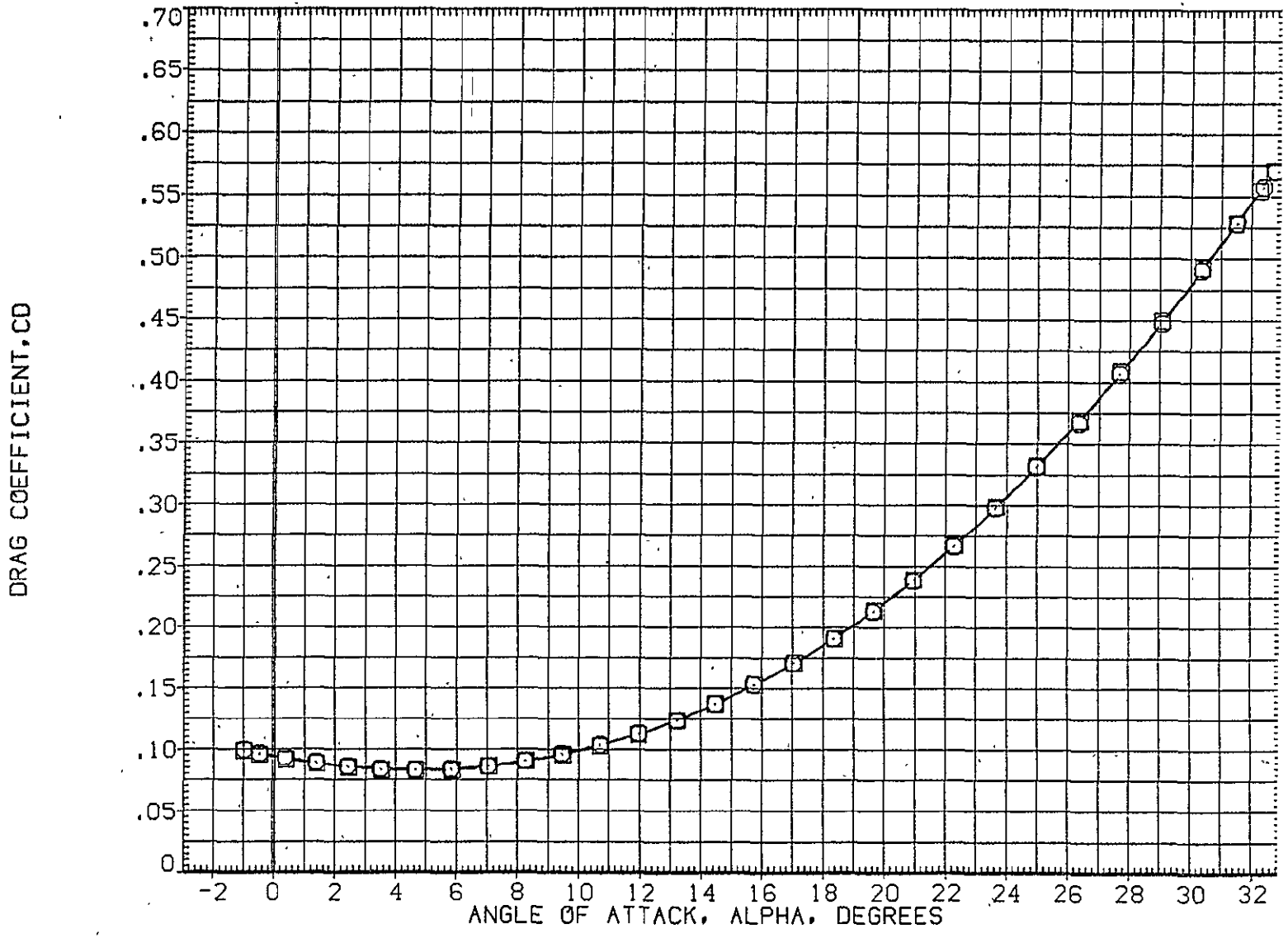


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

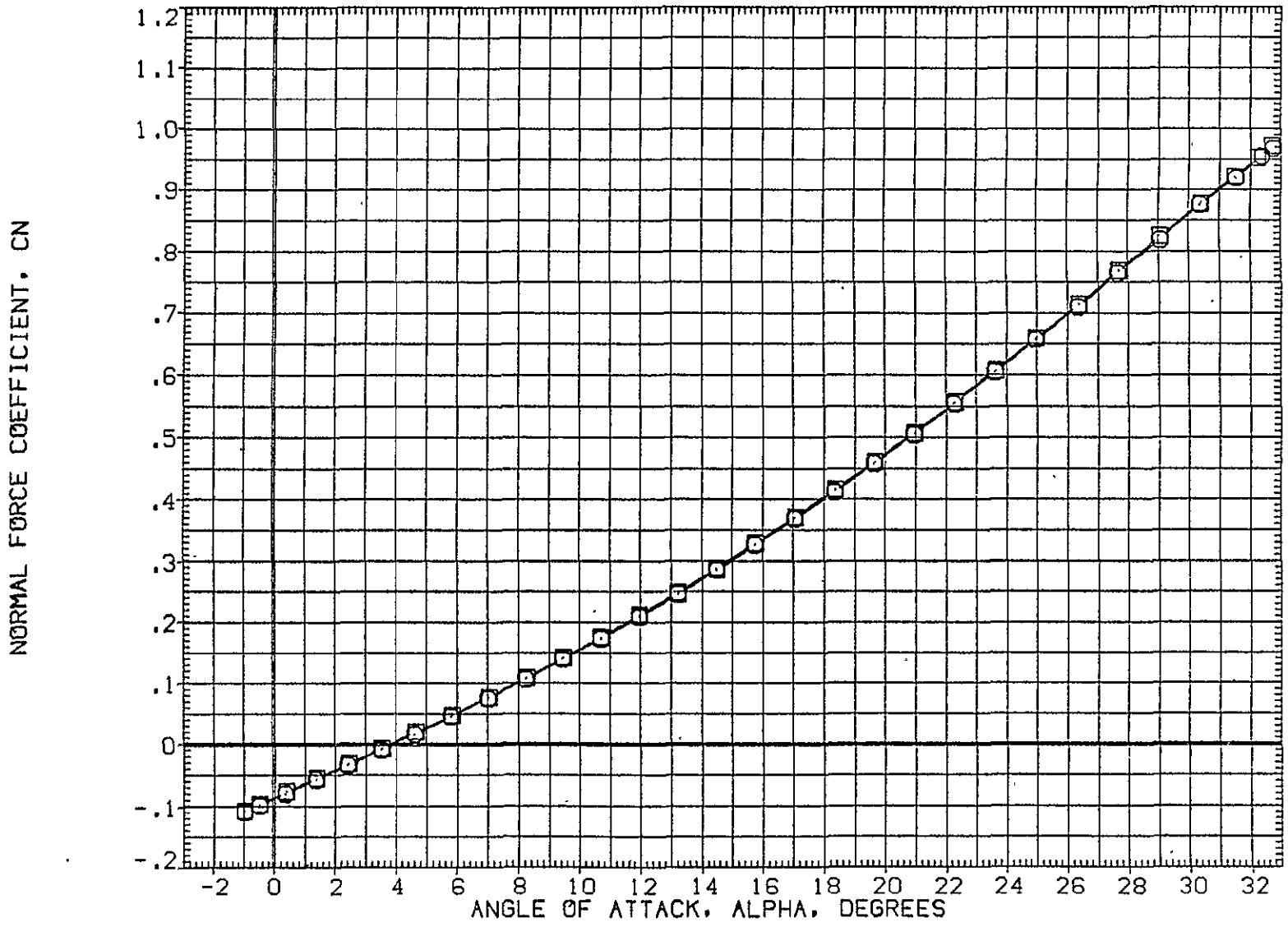
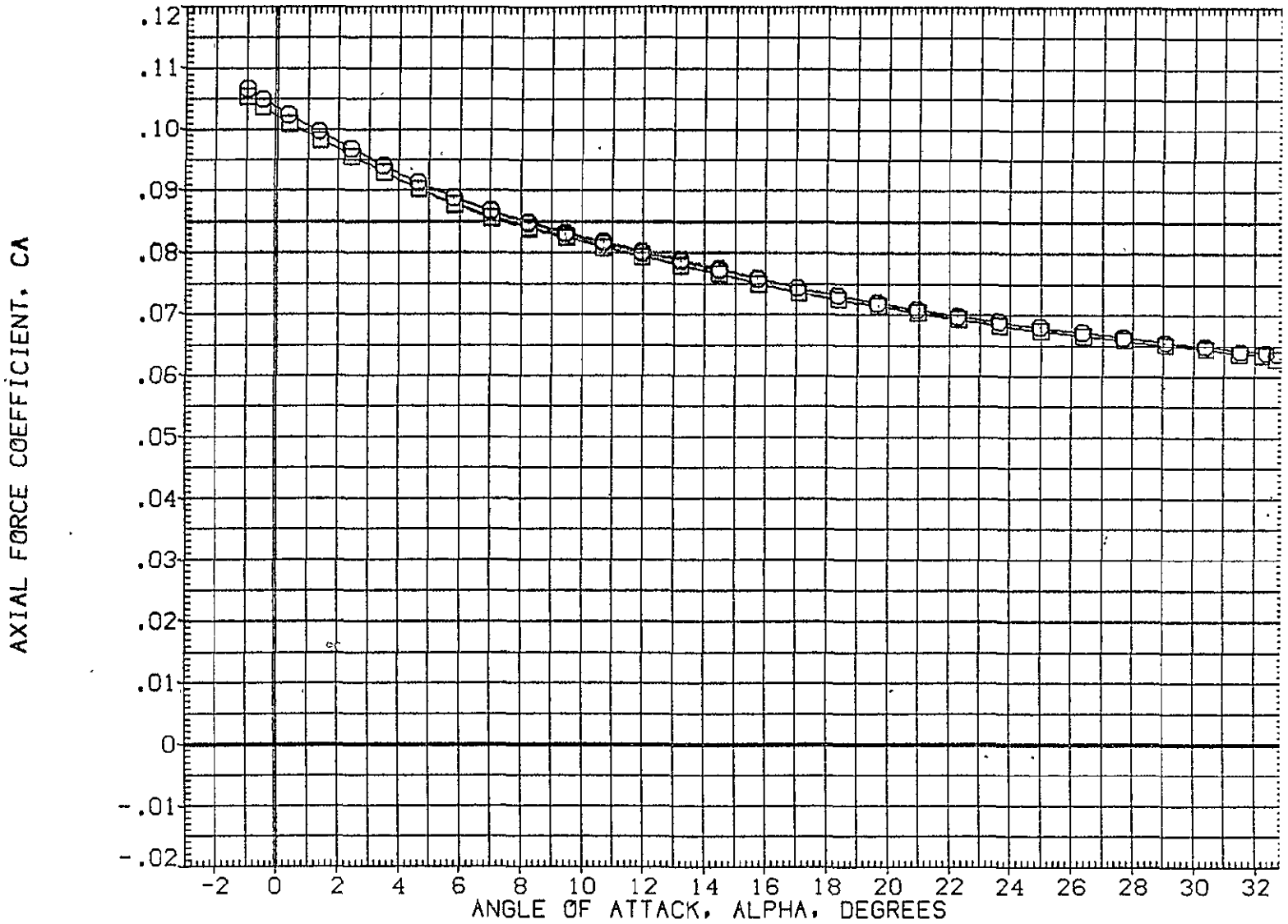


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

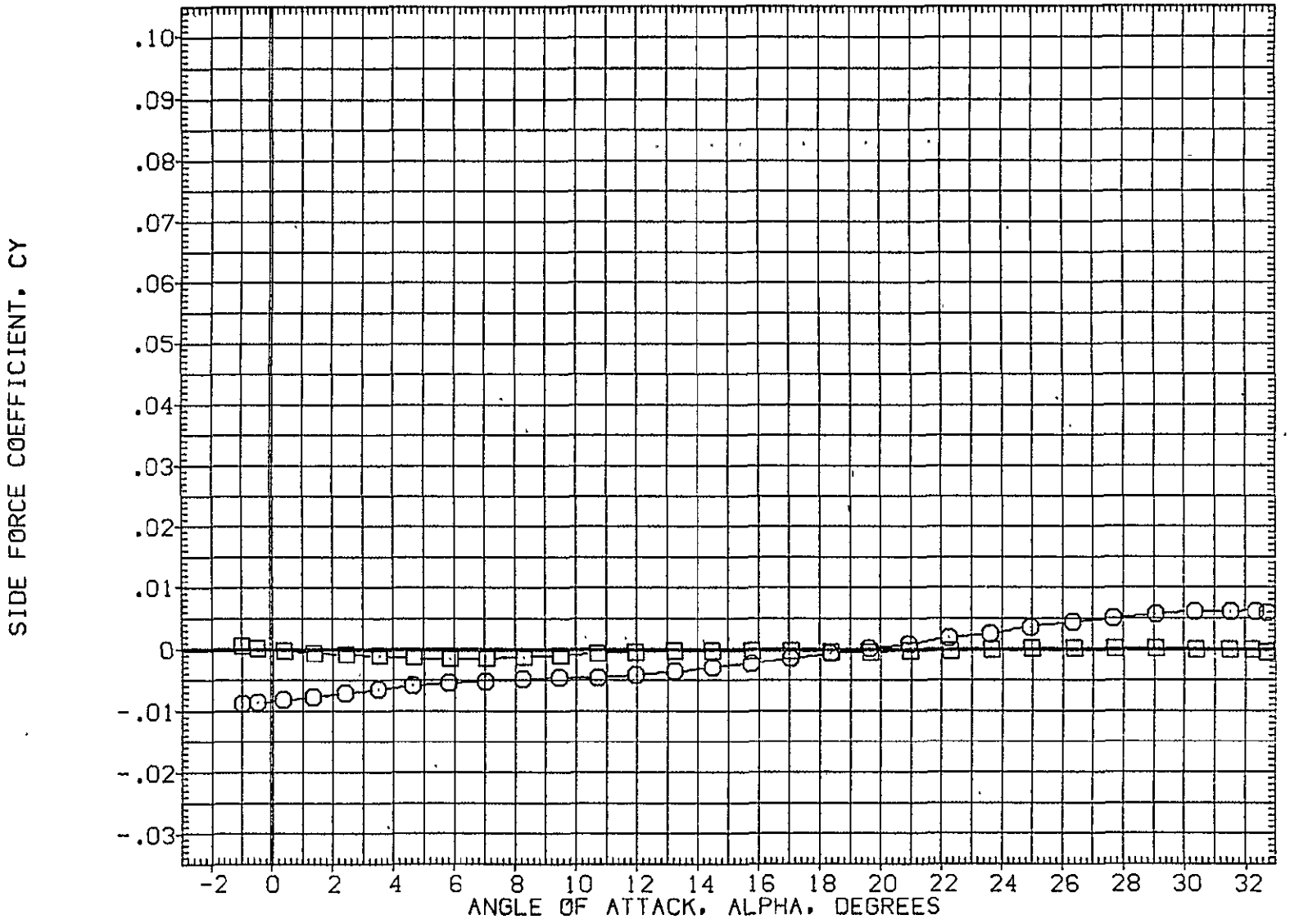


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000
(RHY048)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATI		
SREF	2690.0000	SQ
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

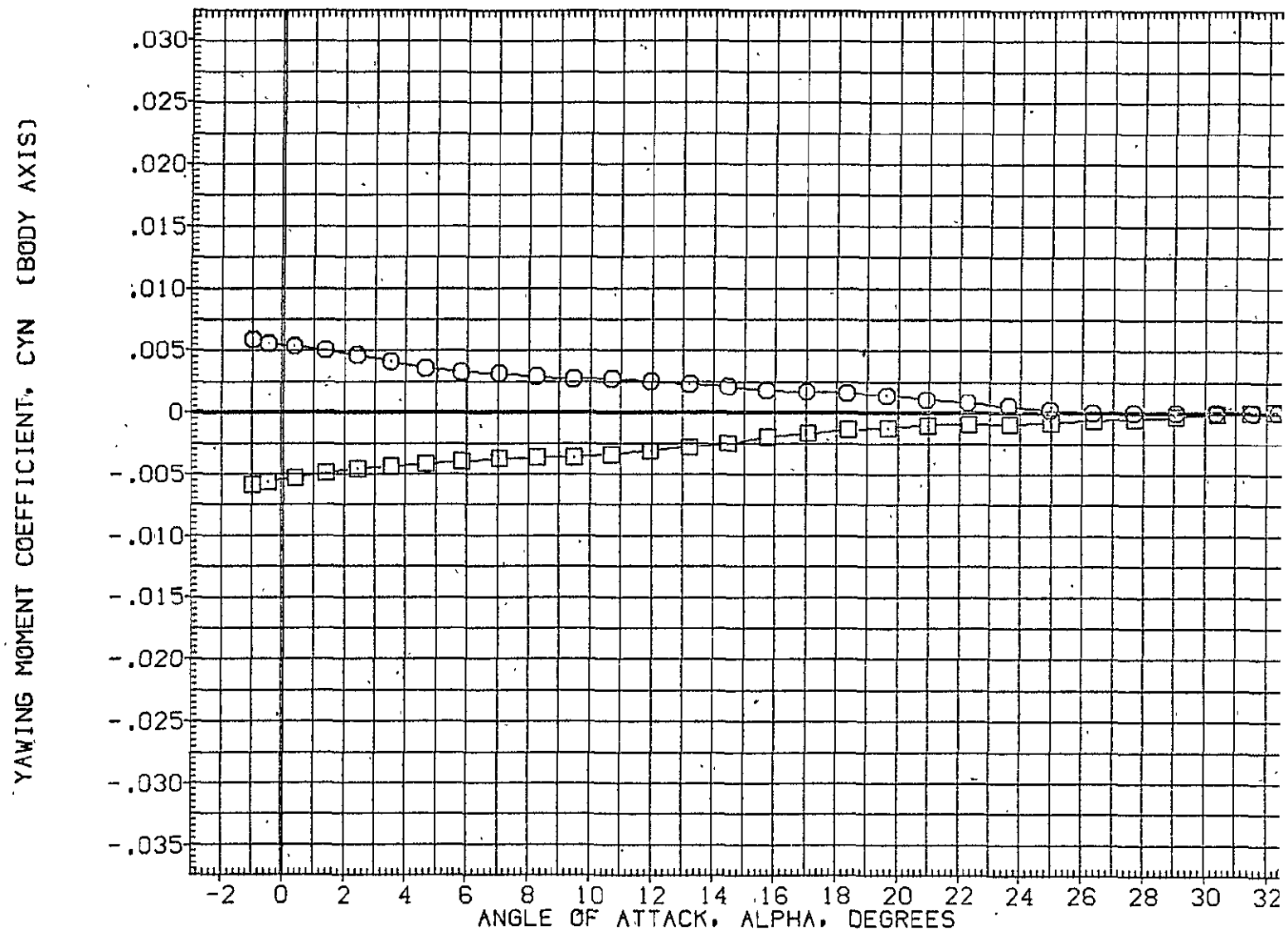


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY034)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000
(RHY048)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

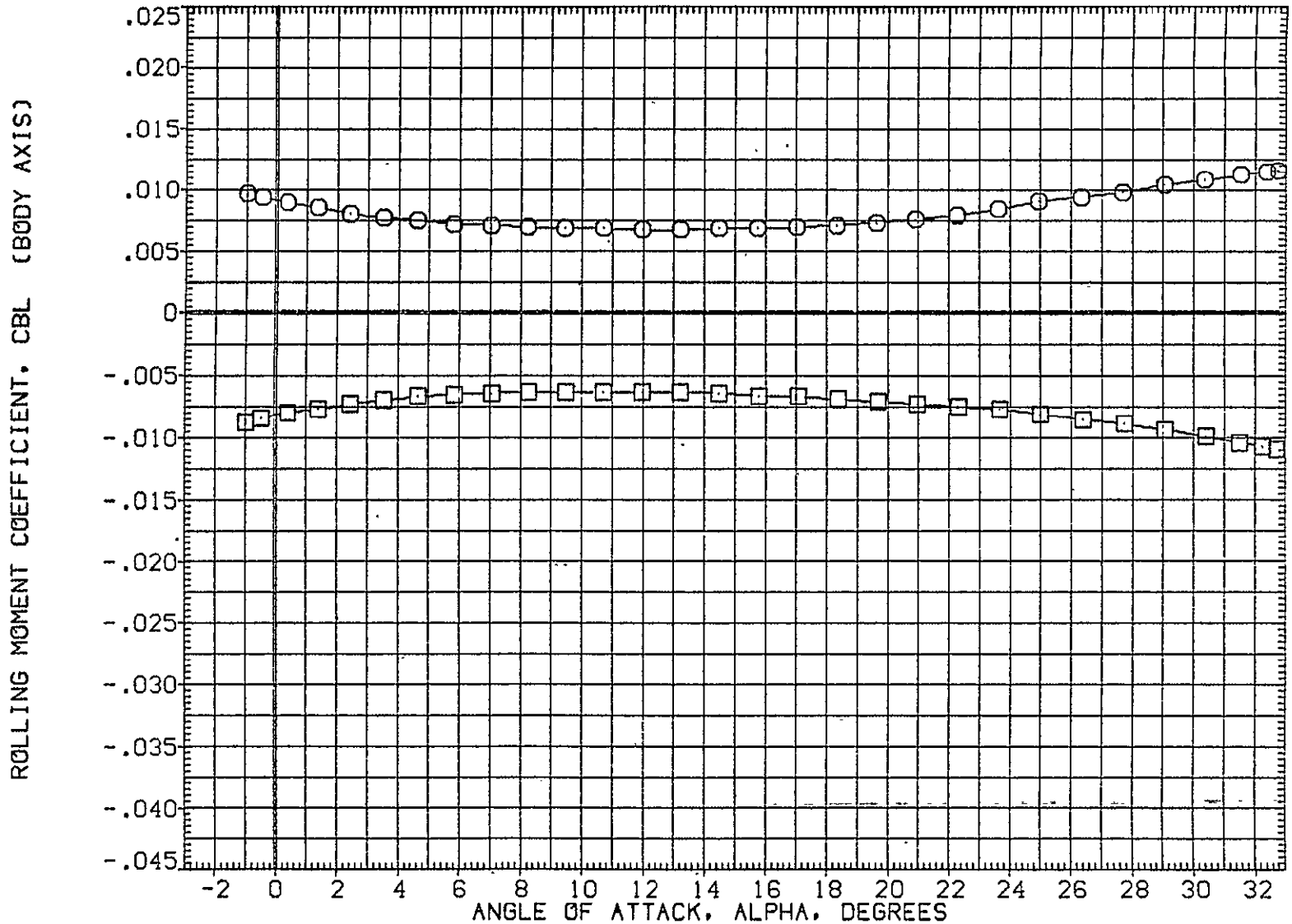


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHYO34)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000
(RHYO48)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	-20.000	5.000	2.000

REFERENCE INFORMATI		
SREF	2690.0000	SQ
LREF	474.8100	IN
BREF	936.6800	IN
XMRP	1076.7000	IN
YMRP	.0000	IN
ZMRP	375.0000	IN
SCALE	.0150	

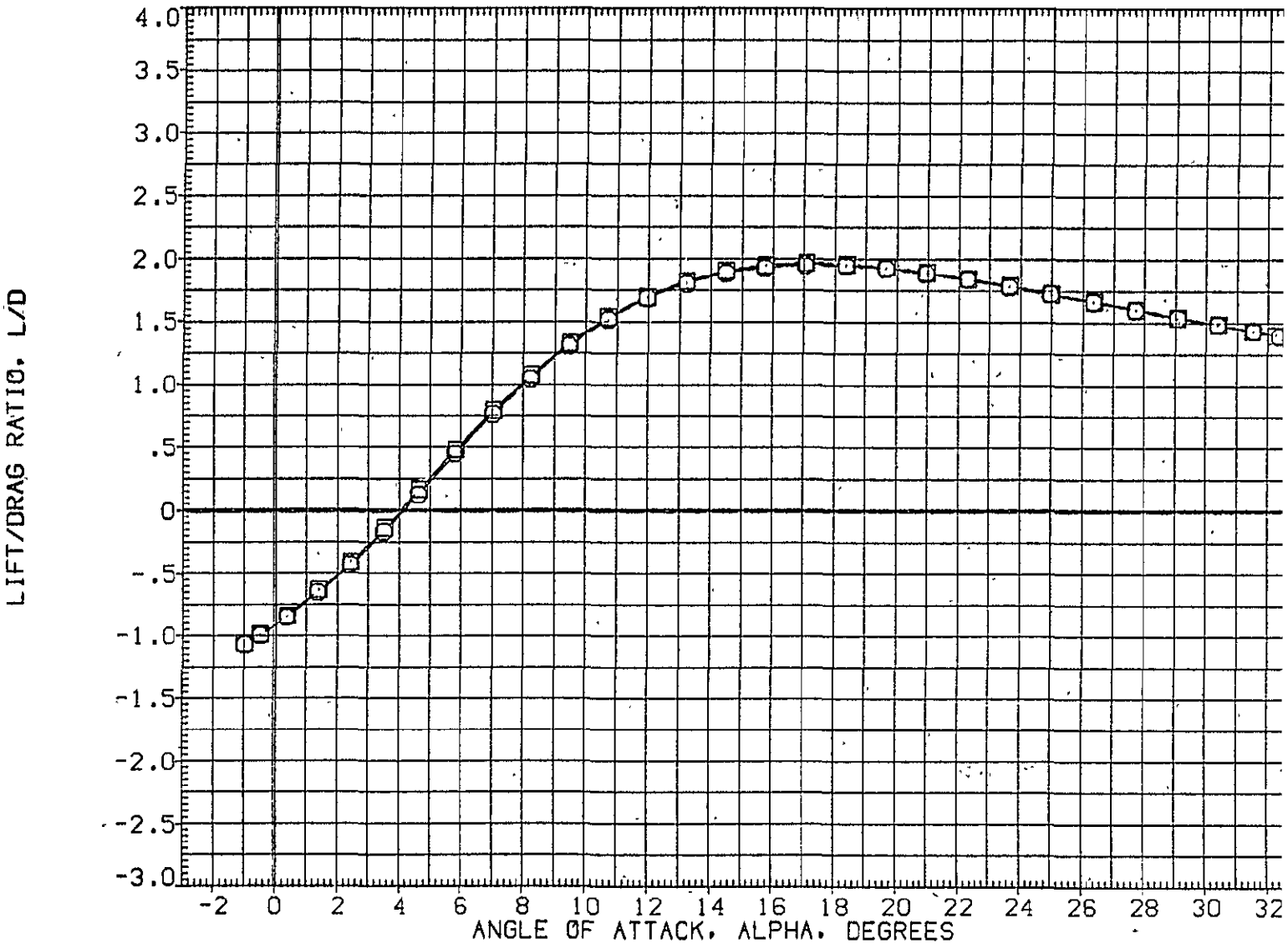


FIG 24 EFFECT OF CONTROL SETTING (NO GRIT)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

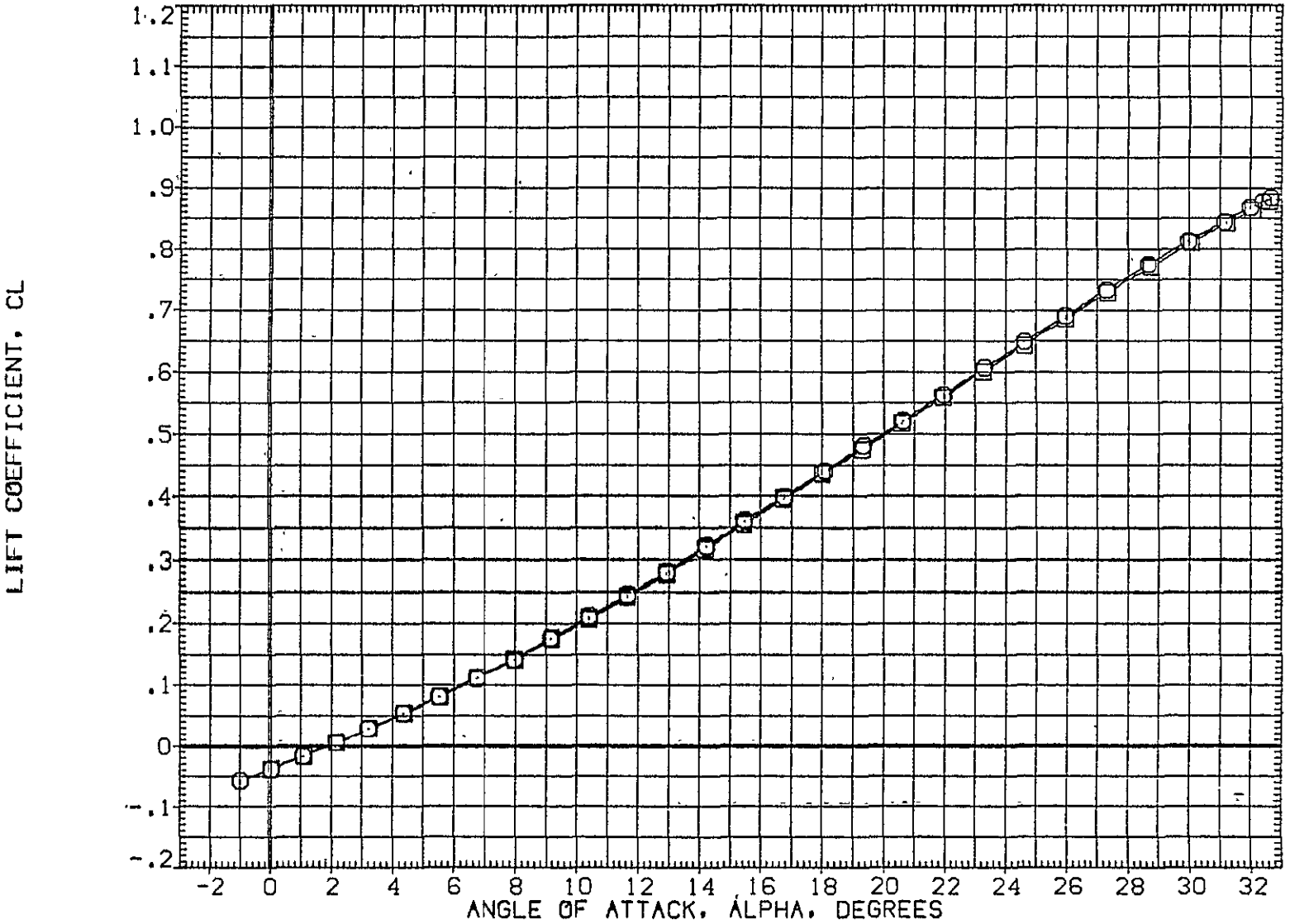


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

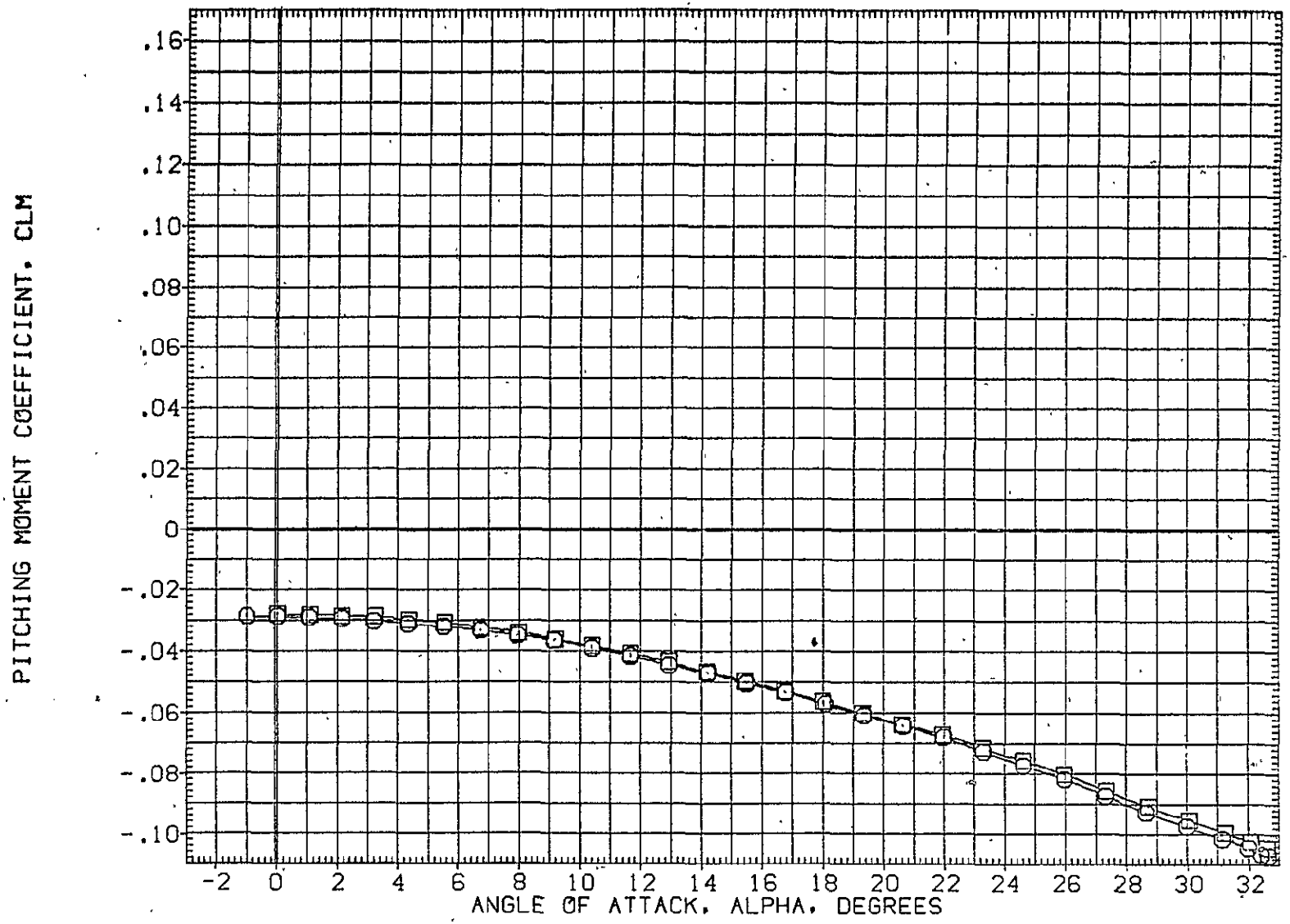


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

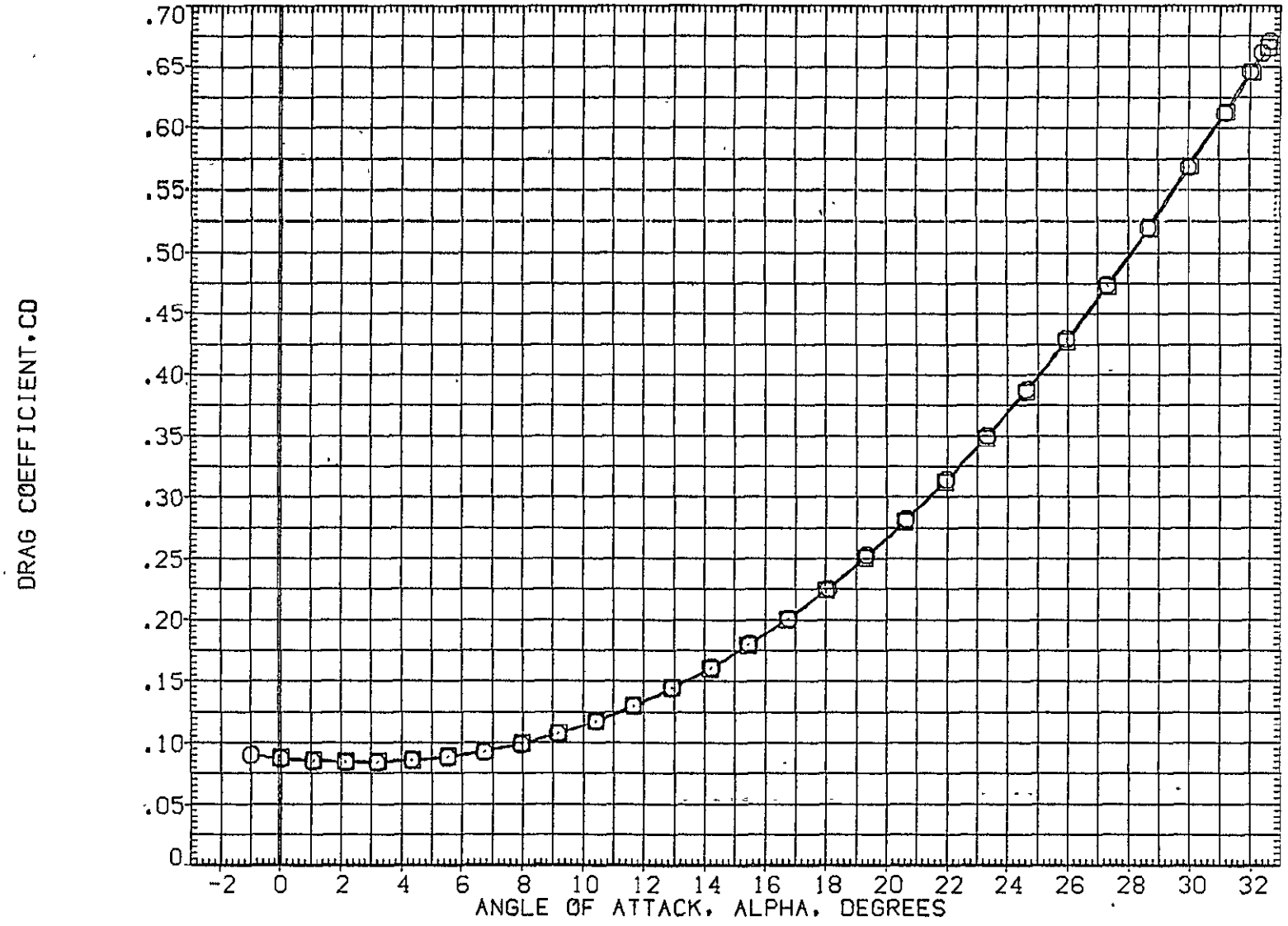


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

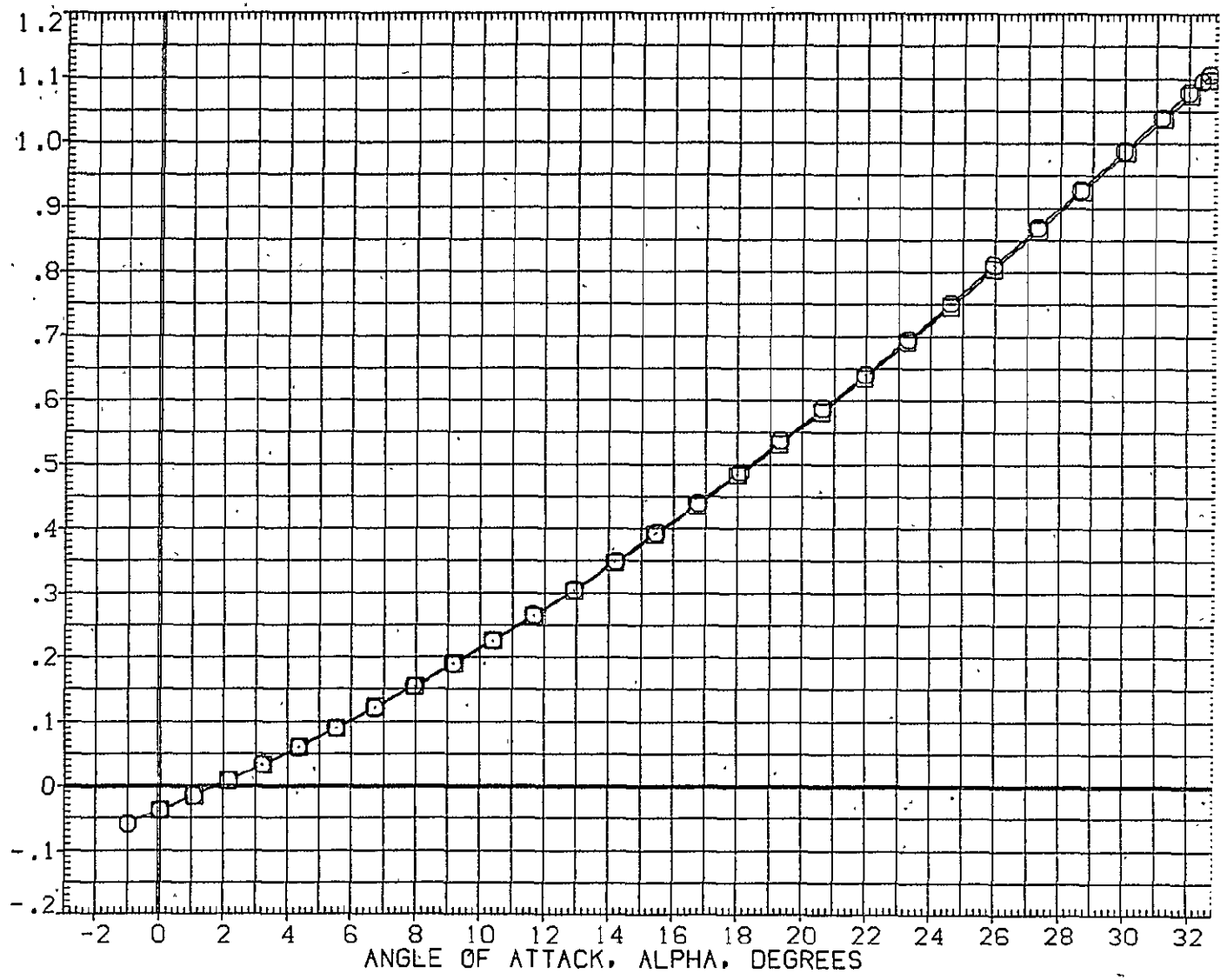


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067) ○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068) □	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

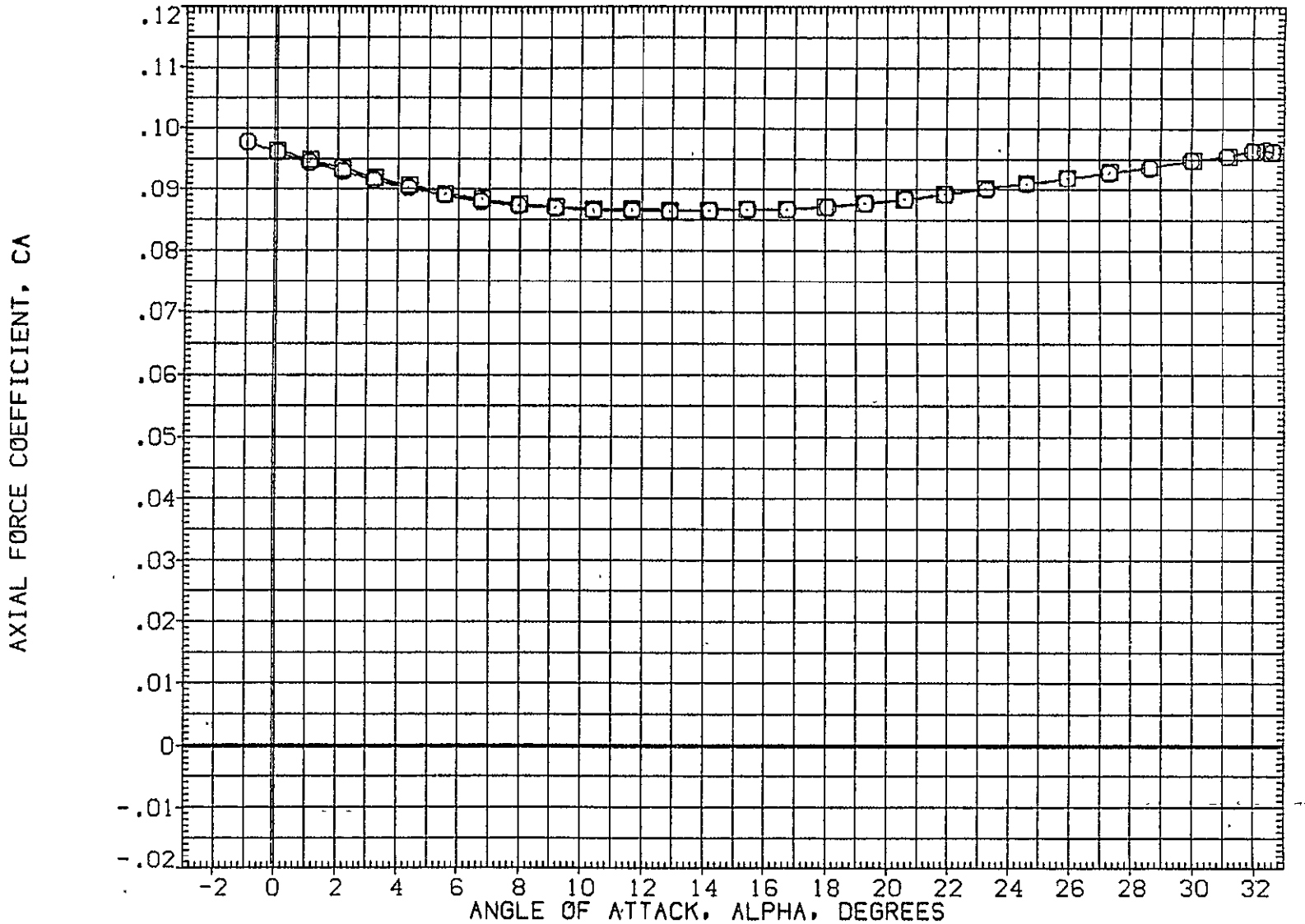


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.
LREF	474.8100	INC
BREF	936.6800	INC
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

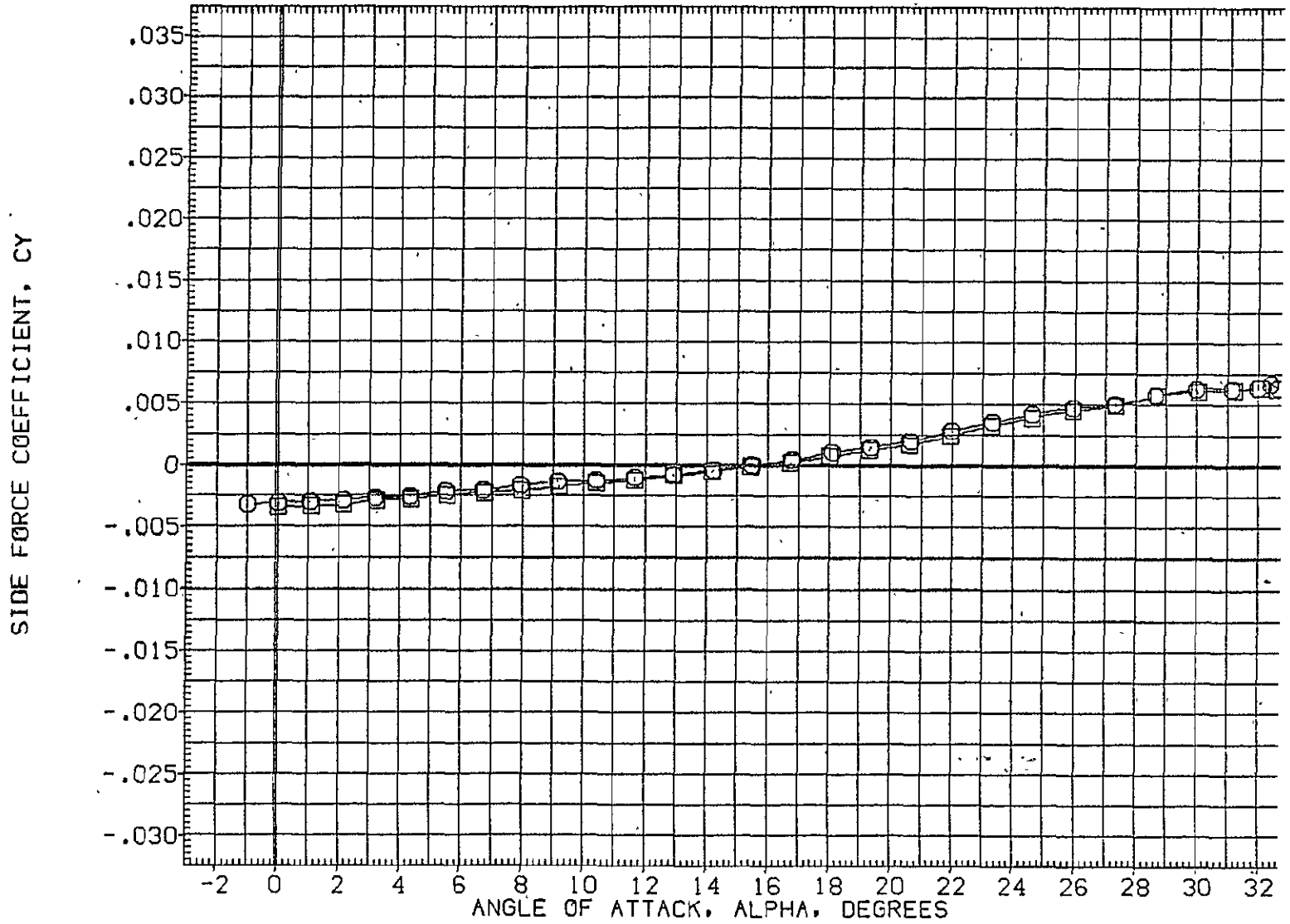


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

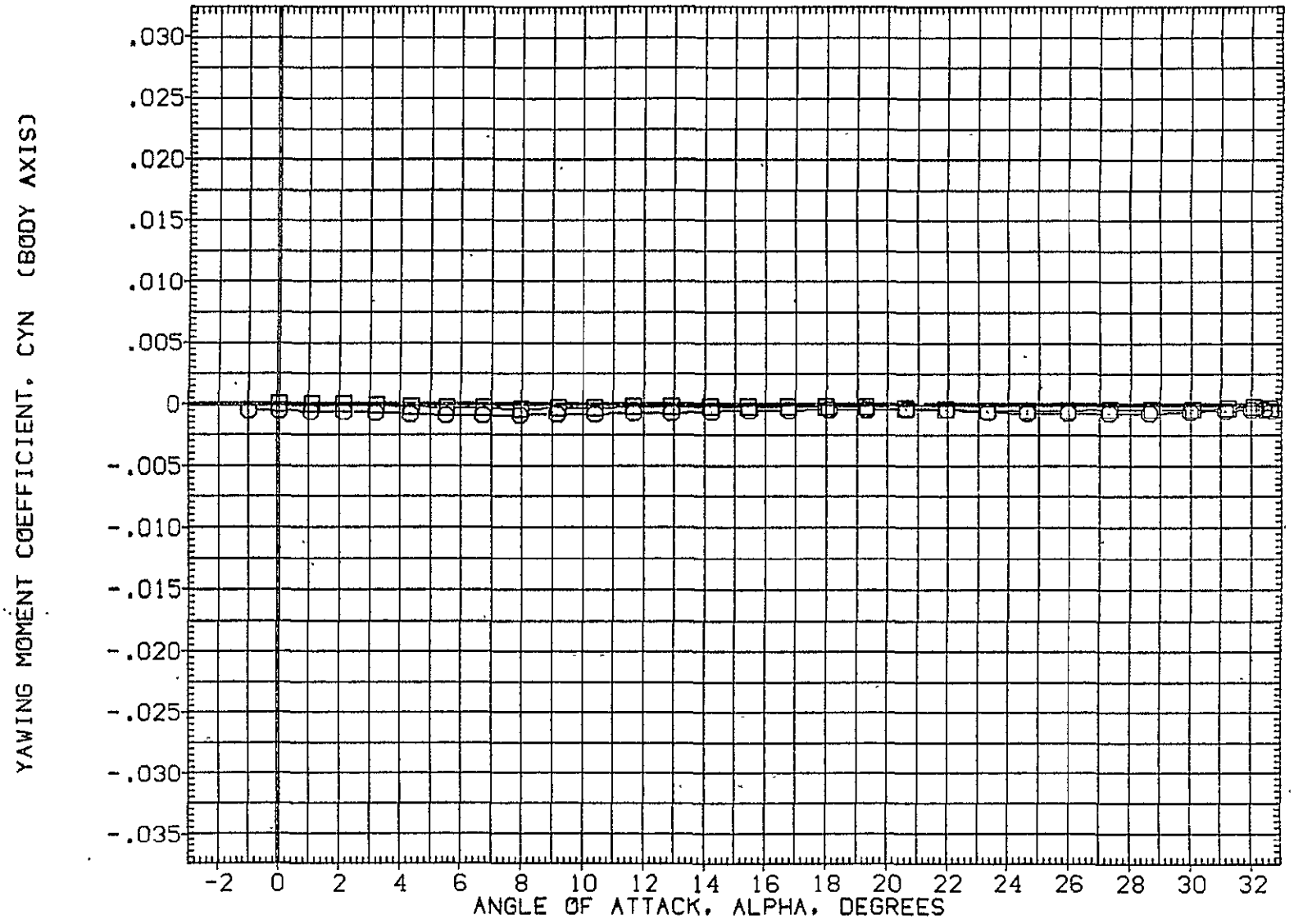


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHY067)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHY068)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.I
LREF	474.8100	INCI
BREF	936.6800	INCI
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

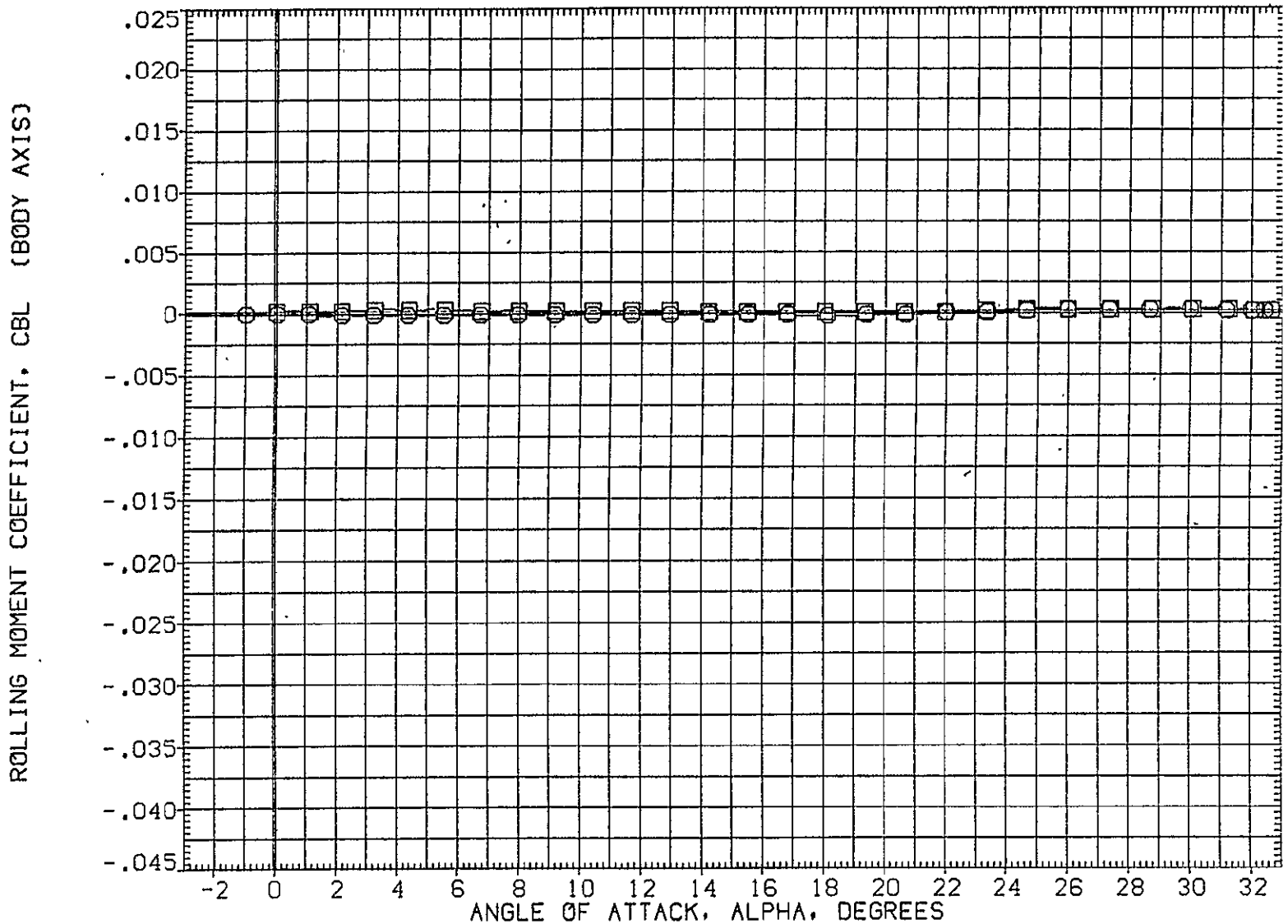


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	AILRON	LWGRIT	RWGRIT
(RHYO67)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	.000
(RHYO68)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	25.000	25.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

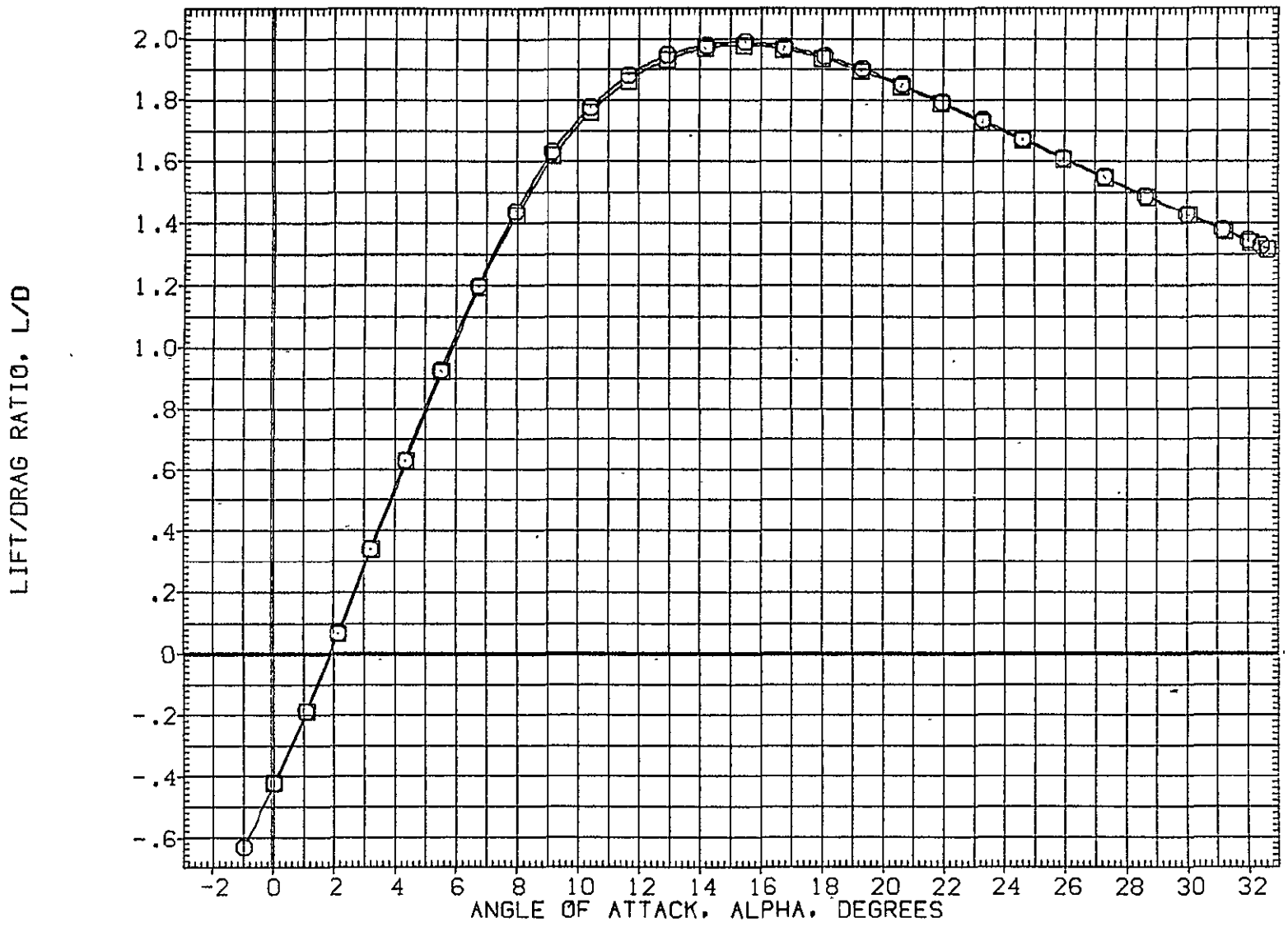


FIG 25 EFFECT OF GRIT (ELEVON= 15)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT
LREF	474.8100	INCHE
BREF	936.6800	INCHE
XMRP	1076.7000	IN. X
YMRP	.0000	IN. Y
ZMRP	375.0000	IN. Z
SCALE	.0150	

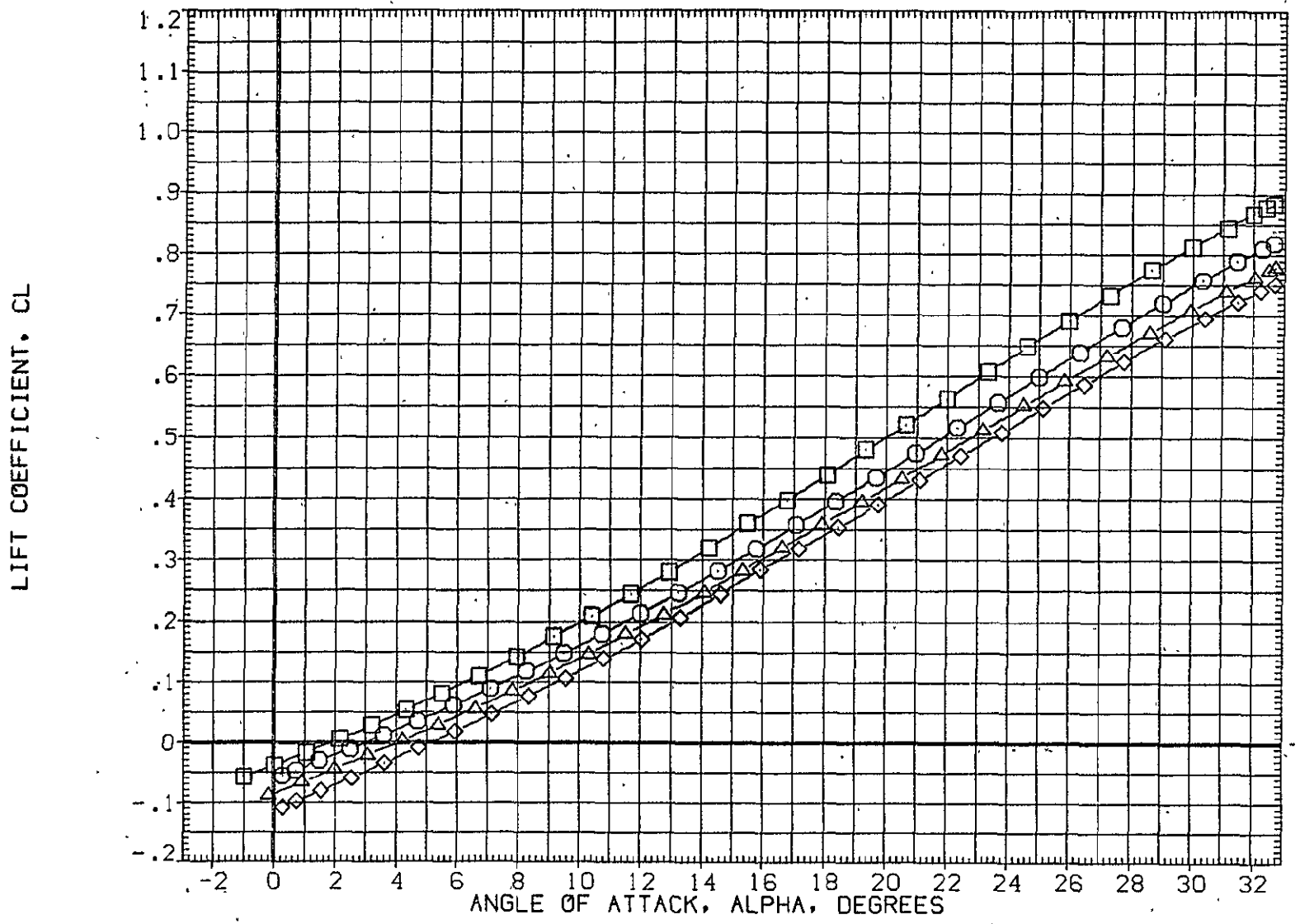


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

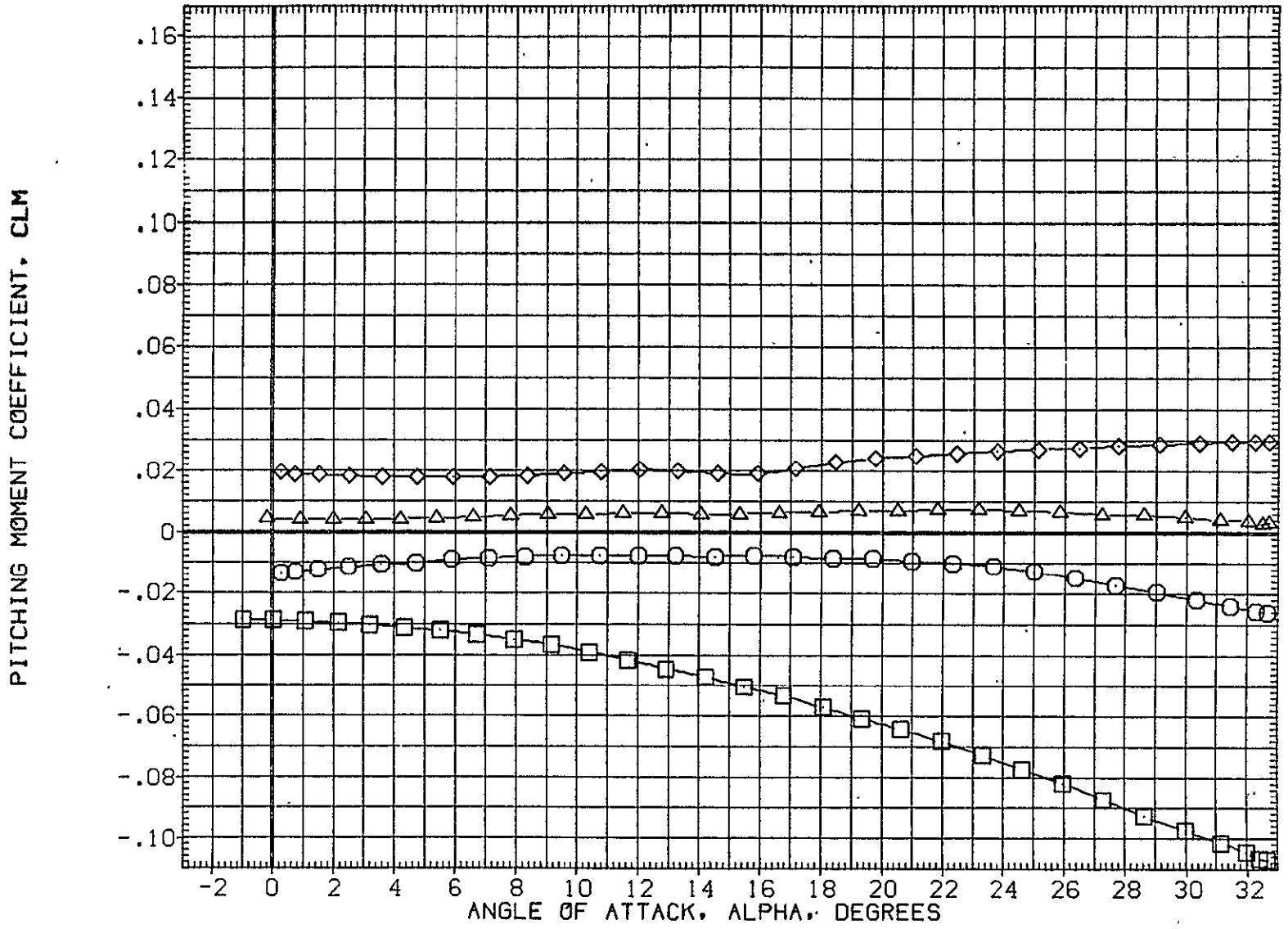


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	15.000	.000	5.000	2.000
(RHY055)	⋈	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT
LREF	474.8100	INCHE
BREF	936.6800	INCHE
XMRP	1076.7000	IN. X
YMRP	.0000	IN. Y
ZMRP	375.0000	IN. Z
SCALE	.0150	

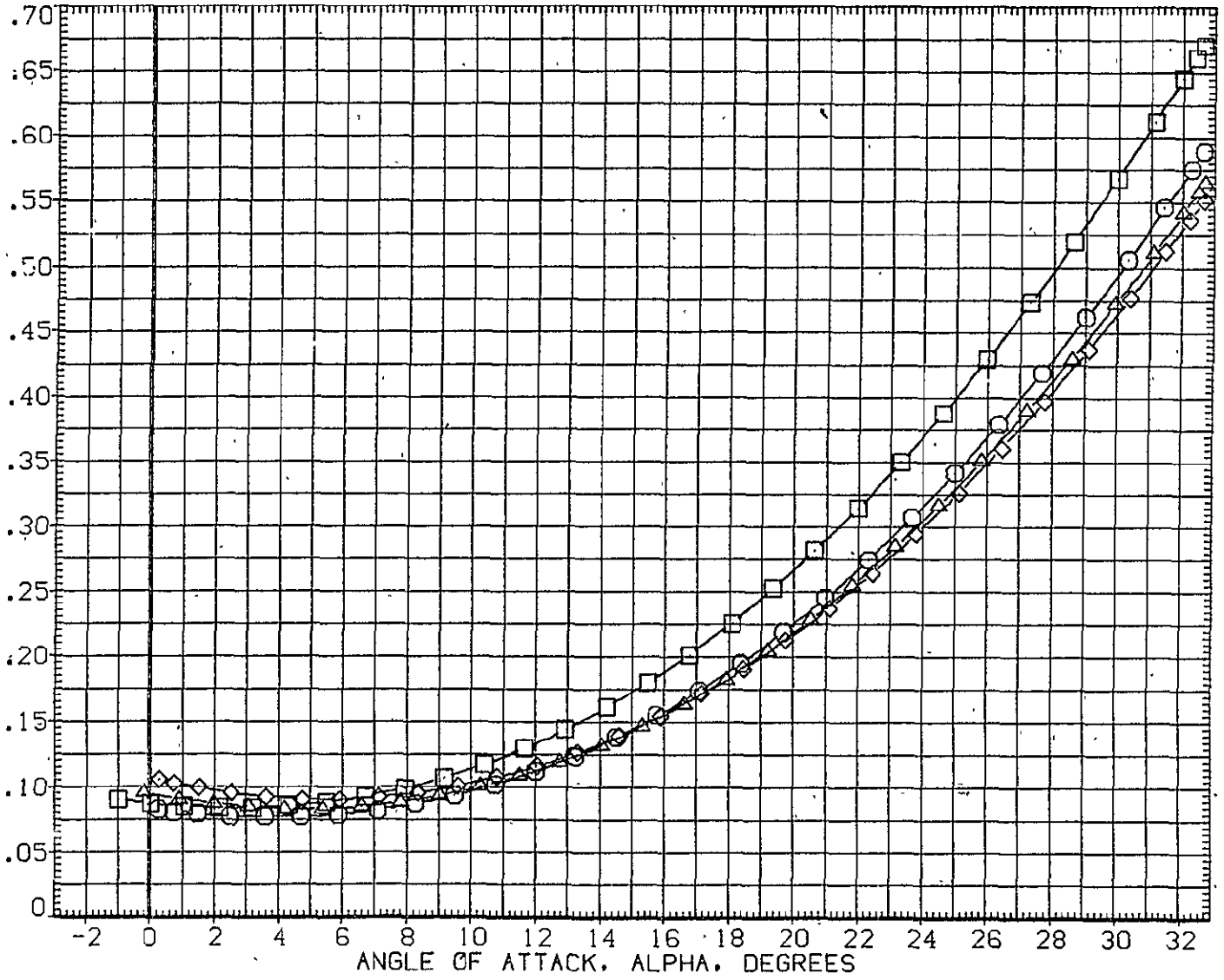


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

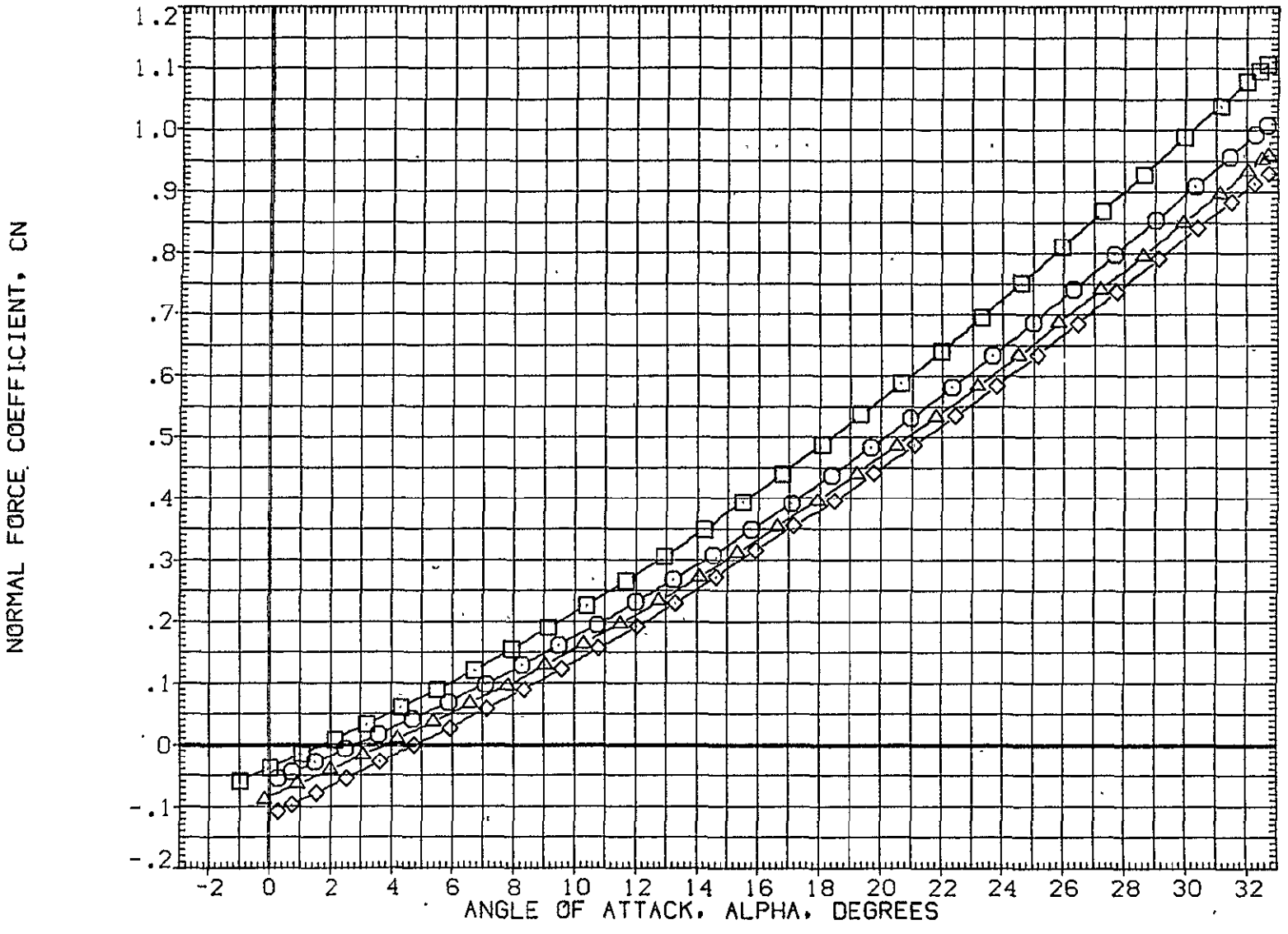


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT
LREF	474.8100	INCHE
BREF	936.6800	INCHE
XMRP	1076.7000	IN. X
YMRP	.0000	IN. Y
ZMRP	375.0000	IN. Z
SCALE	.0150	

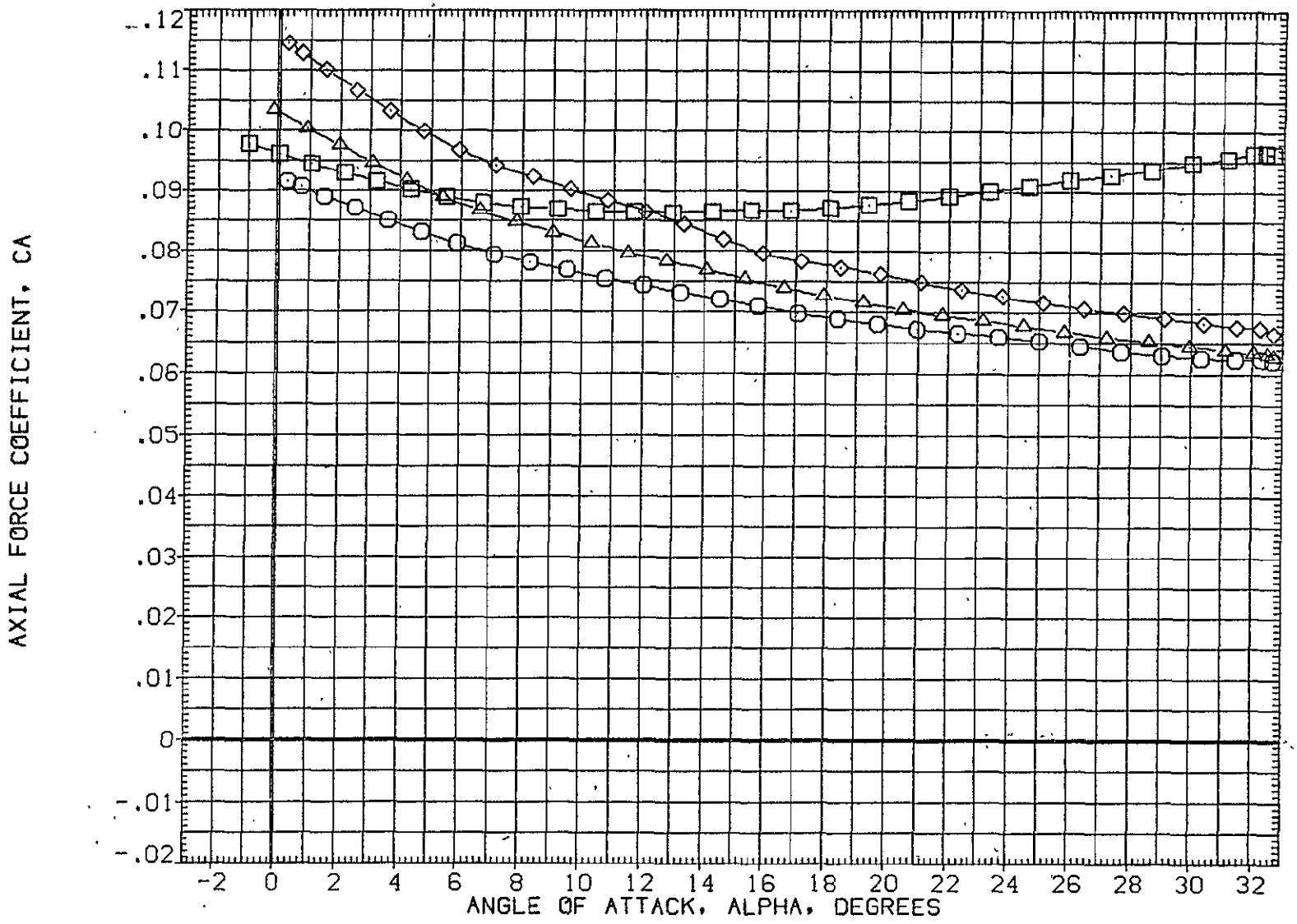


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

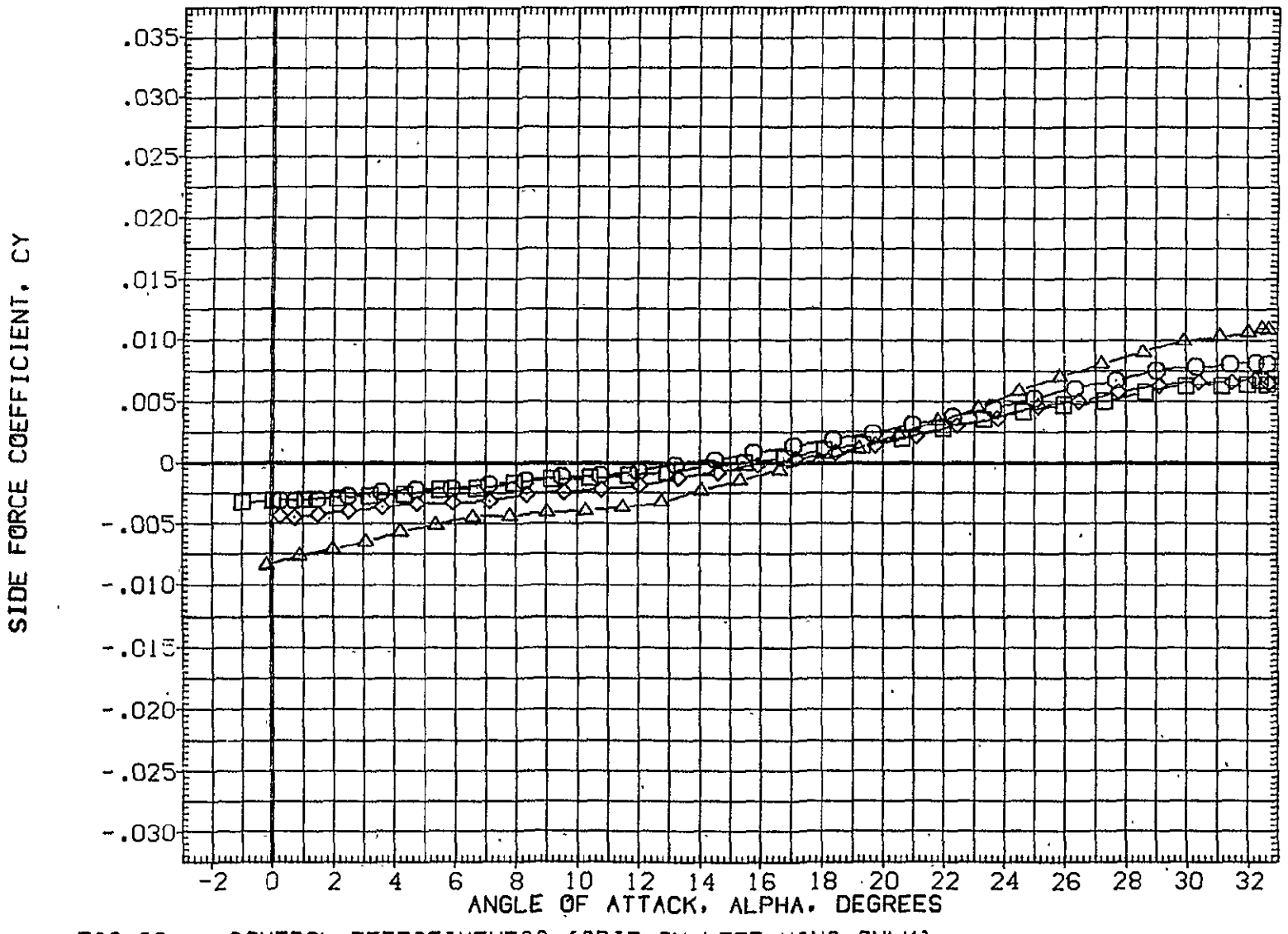


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

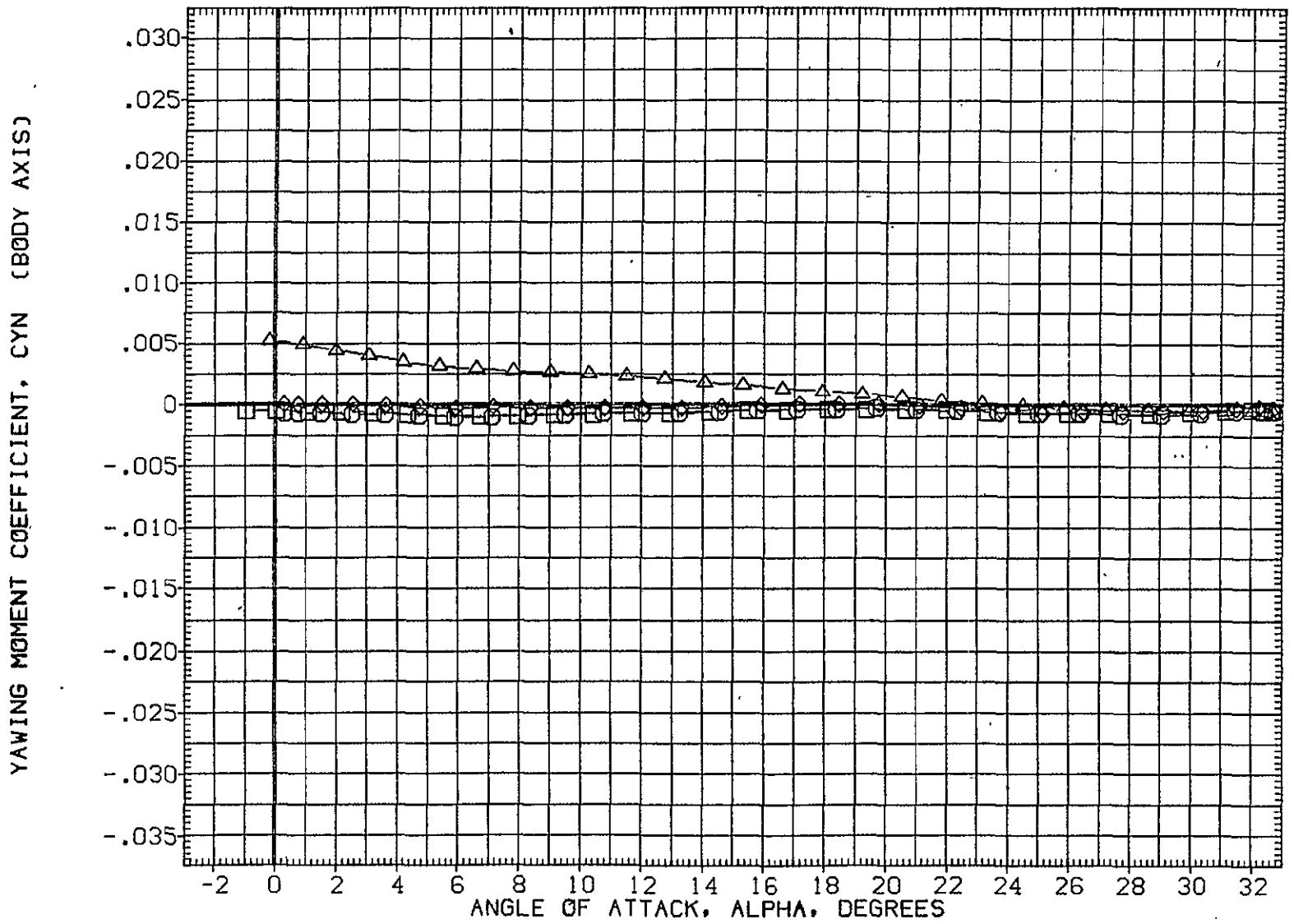


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0150	

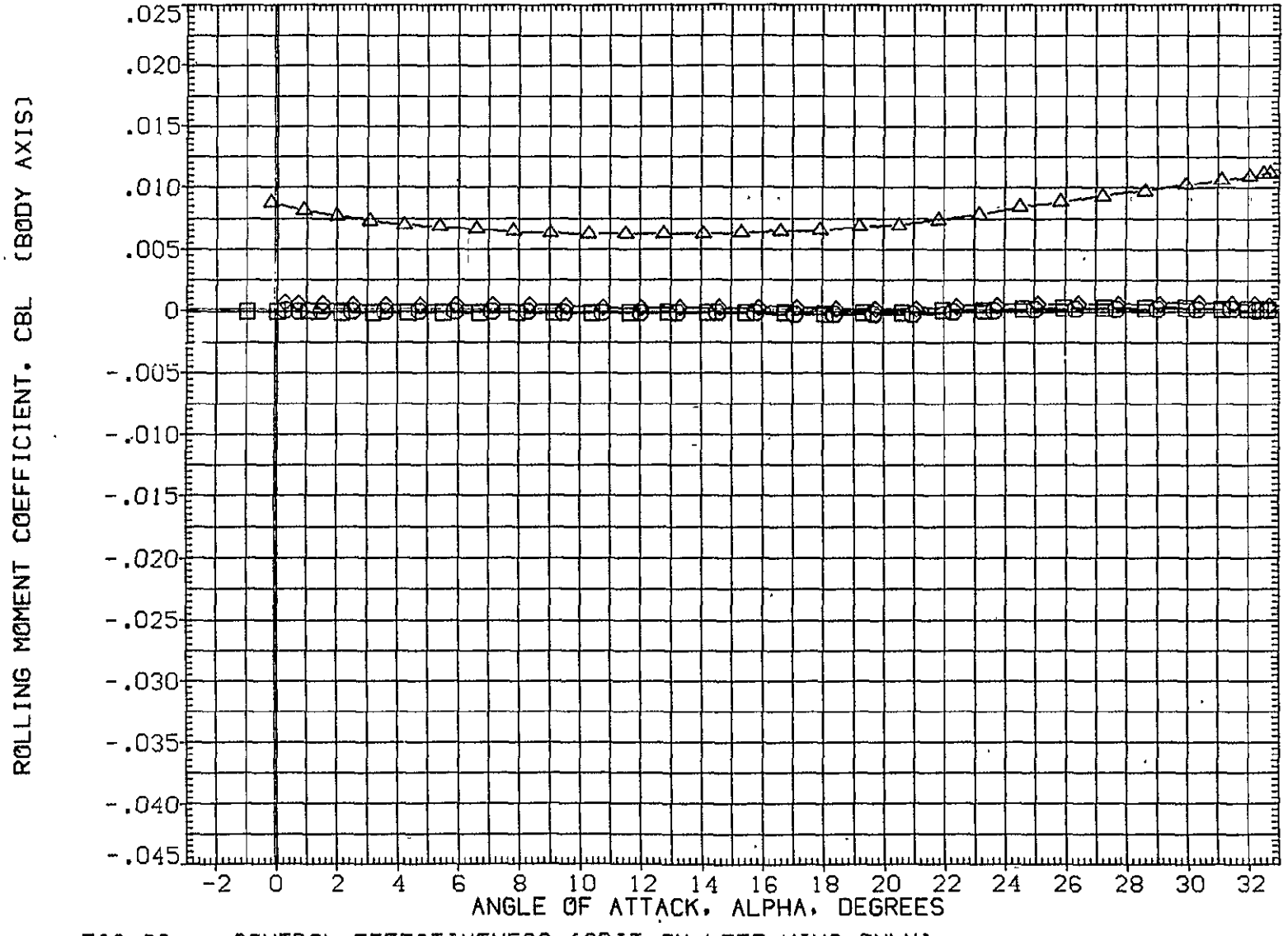


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	A-RATE	A-SCHD
(RHY014)	○	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	.000	.000	5.000	2.000
(RHY067)	□	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	15.000	.000	5.000	2.000
(RHY055)	◇	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-40.000	.000	5.000	2.000
(RHY030)	△	LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0)	-20.000	20.000	5.000	2.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	INCH
BREF	936.6800	INCH
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

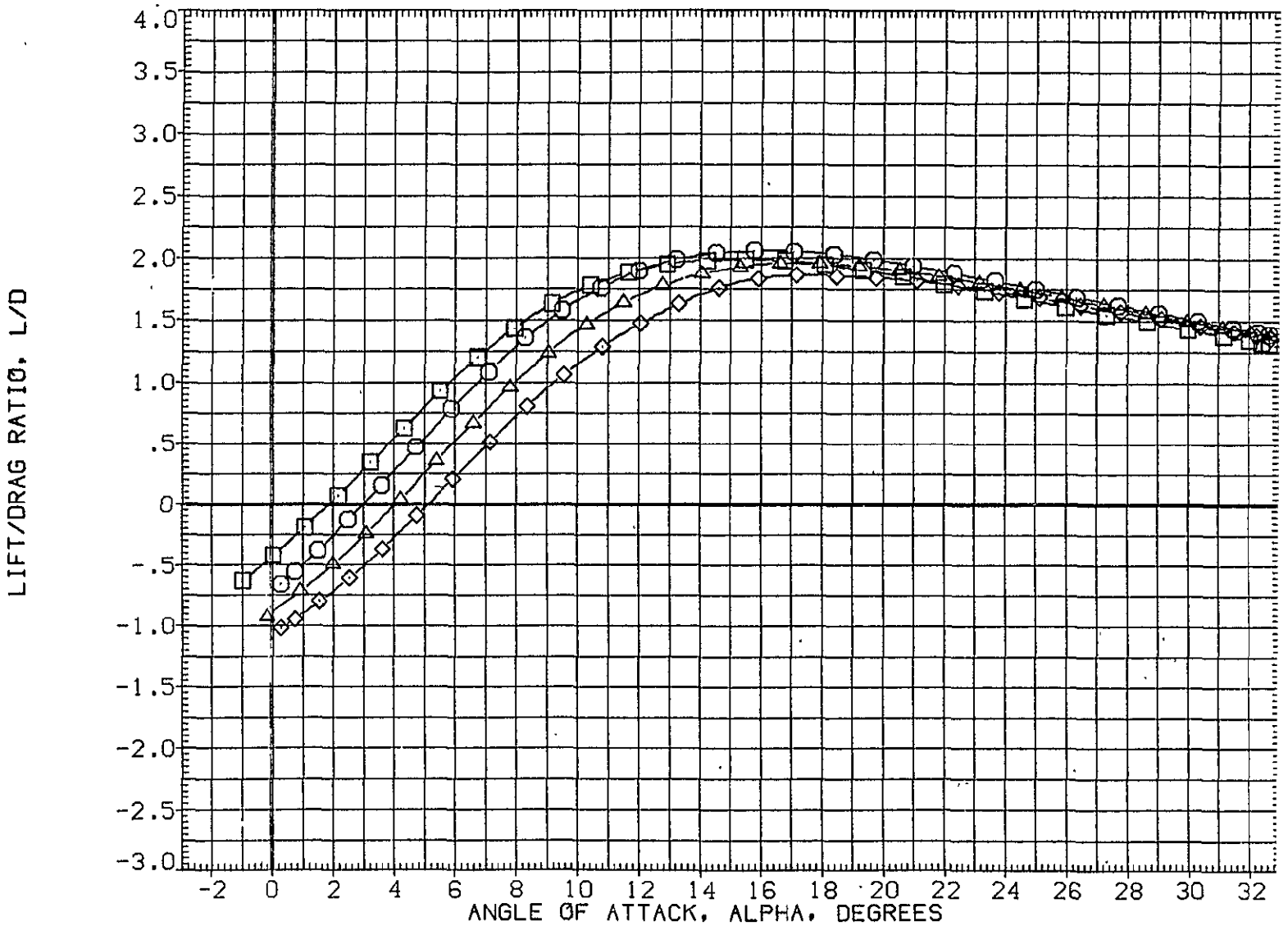


FIG 26 CONTROL EFFECTIVENESS (GRIT ON LEFT WING ONLY)

(A)MACH = 4.59

TABULATED SOURCE DATA

Tabulations of plotted data are available on request from Data Management Services.

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LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY001) (19 JAN 76)

REFERENCE DATA

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LREF =	474.8100 INCHES	YMRP =	.0000 IN. Y0				
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. Z0				
SCALE =	.0150						

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 53/ 0 RN/L = 16.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.460	.00000	-.05470	-.01260	.09260	-.00250	-.00010	-.00010	-.05540	.08530	-.64990
4.591	1.800	.00000	-.02840	-.01270	.09000	-.00360	-.00010	.00020	-.03100	.08210	-.37800
4.591	2.920	-.01000	-.00260	-.01070	.08740	-.00350	-.00010	.00020	-.00670	.08010	-.08440
4.591	3.930	-.02000	.01920	-.00960	.08550	-.00310	-.00020	.00020	.01380	.07950	.17370
4.591	4.960	-.02000	.04240	-.00910	.08360	-.00270	-.00040	.00020	.03560	.07980	.44690
4.591	6.020	-.03000	.06730	-.00850	.08170	-.00240	-.00050	.00020	.05910	.08110	.72880
4.591	7.070	-.04000	.09280	-.00800	.08030	-.00230	-.00030	.00020	.08310	.08380	.99230
4.591	8.110	-.04000	.11920	-.00740	.07890	-.00250	-.00040	.00020	.10790	.08760	1.23170
4.591	9.160	-.05000	.14600	-.00720	.07790	-.00220	-.00030	.00010	.13290	.09260	1.43430
4.591	10.220	-.06000	.17440	-.00660	.07640	-.00190	-.00030	.00010	.15940	.09860	1.61600
4.591	11.270	-.06000	.20460	-.00660	.07540	-.00170	-.00030	.00010	.18750	.10630	1.76300
4.591	12.320	-.07000	.23460	-.00650	.07440	-.00140	-.00020	.00000	.21500	.11510	1.86760
4.591	13.380	-.08000	.26670	-.00670	.07340	-.00100	-.00030	.00000	.24430	.12550	1.94540
4.591	14.450	-.08000	.29970	-.00700	.07250	-.00060	-.00020	.00000	.27410	.13730	1.99580
4.591	15.510	-.09000	.33360	-.00690	.07160	-.00020	-.00020	.00000	.30440	.15050	2.02200
4.591	16.570	-.10000	.36830	-.00670	.07050	.00000	.00000	.00000	.33520	.16500	2.03150
4.591	17.640	-.10000	.40440	-.00670	.06960	.00040	.00000	.00000	.36670	.18120	2.02380
4.591	18.700	-.11000	.44160	-.00700	.06880	.00070	.00000	.00000	.39880	.19910	2.00270
4.591	19.770	-.12000	.47920	-.00730	.06800	.00100	.00000	.00000	.43070	.21850	1.97100
4.591	20.820	-.12000	.51780	-.00840	.06750	.00140	.00000	.00000	.46280	.23960	1.93120
4.591	21.890	-.13000	.55680	-.00990	.06700	.00190	.00000	.00000	.49470	.26230	1.88600
4.591	22.960	-.14000	.59730	-.00970	.06650	.00230	-.00010	.00000	.52720	.28670	1.83870
4.591	24.020	-.14000	.63840	-.01050	.06600	.00300	-.00030	.00010	.55960	.31270	1.78950
4.591	25.080	-.15000	.68050	-.01170	.06530	.00370	-.00040	.00020	.59210	.34010	1.74050
4.591	26.140	-.15000	.72370	-.01350	.06450	.00410	-.00050	.00020	.62490	.36950	1.69100
4.591	27.190	-.16000	.76660	-.01490	.06380	.00430	-.00050	.00020	.65650	.39970	1.64220
4.591	28.230	-.17000	.81010	-.01630	.06310	.00450	-.00040	.00020	.68770	.43170	1.59290
4.591	29.280	-.17000	.85430	-.01830	.06240	.00490	-.00040	.00030	.71860	.46520	1.54440
4.591	30.300	-.18000	.89800	-.02060	.06170	.00510	-.00030	.00030	.74820	.49950	1.49770
4.591	31.320	-.18000	.94230	-.02280	.06110	.00490	-.00010	.00020	.77740	.53520	1.45250
4.591	32.250	-.19000	.98460	-.02490	.06070	.00490	.00000	.00010	.80440	.57010	1.41100
	GRADIENT	-.00533	.02170	.00090	-.00202	-.00001	-.00006	.00006	.02035	-.00125	.24592

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY002) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 54/ 0 RN/L = 16.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.290	.00000	-.05820	-.01310	.09330	-.00300	.00000	.00000	-.05870	.08670	-.67660
4.591	1.590	.00000	-.03210	-.01170	.09040	-.00330	.00000	.00020	-.03440	.08300	-.41480
4.591	2.900	-.01000	-.00330	-.00970	.08750	-.00360	.00000	.00020	-.00740	.08050	-.09190
4.591	4.010	-.02000	.02020	-.00940	.08570	-.00350	-.00010	.00030	.01460	.08010	.18270
4.591	5.160	-.02000	.04630	-.00820	.08340	-.00310	-.00020	.00030	.03920	.08040	.48790
4.591	6.310	-.03000	.07420	-.00720	.08130	-.00310	-.00040	.00020	.06560	.08190	.80130
4.591	7.450	-.04000	.10090	-.00710	.07980	-.00260	-.00030	.00020	.09060	.08510	1.06490
4.591	8.620	-.05000	.13070	-.00650	.07850	-.00190	-.00030	.00020	.11860	.09000	1.31720
4.591	9.770	-.05000	.16190	-.00640	.07710	-.00180	-.00020	.00010	.14770	.09620	1.53440
4.591	10.930	-.06000	.19470	-.00630	.07570	-.00180	-.00020	.00010	.17830	.10390	1.71480
4.591	12.090	-.07000	.22800	-.00620	.07460	-.00140	-.00020	.00010	.20890	.11330	1.84340
4.591	13.260	-.08000	.26280	-.00630	.07350	-.00110	-.00020	.00010	.24070	.12440	1.93490
4.591	14.430	-.08000	.29850	-.00610	.07260	-.00080	-.00020	.00000	.27290	.13720	1.98840
4.591	15.600	-.09000	.33560	-.00630	.07150	-.00020	-.00010	.00000	.30600	.15160	2.01840
4.591	16.780	-.10000	.37520	-.00660	.07030	.00020	.00000	.00000	.34120	.16810	2.02900
4.591	17.940	-.11000	.41480	-.00670	.06940	.00060	.00000	.00000	.37570	.18630	2.01650
4.591	19.120	-.11000	.45590	-.00700	.06850	.00110	.00000	.00000	.41090	.20660	1.98860
4.591	20.290	-.12000	.49770	-.00760	.06770	.00150	.00000	.00000	.44600	.22870	1.95010
4.591	21.460	-.13000	.54110	-.00820	.06720	.00180	.00000	.00000	.48190	.25300	1.90430
4.591	22.640	-.13000	.58520	-.00890	.06660	.00250	-.00010	.00010	.51750	.27930	1.85260
4.591	23.810	-.14000	.63070	-.00960	.06610	.00310	-.00030	.00020	.55360	.30780	1.79820
4.591	24.980	-.15000	.67710	-.01110	.06550	.00380	-.00040	.00030	.58950	.33800	1.74380
4.591	26.150	-.15000	.72430	-.01230	.06460	.00430	-.00050	.00030	.62520	.37000	1.68950
4.591	27.310	-.16000	.77250	-.01470	.06370	.00440	-.00050	.00030	.66080	.40390	1.63610
4.591	28.470	-.17000	.82070	-.01660	.06300	.00460	-.00040	.00030	.69530	.43950	1.58170
4.591	29.620	-.17000	.86960	-.01910	.06210	.00500	-.00040	.00030	.72920	.47680	1.52910
4.591	30.760	-.18000	.91890	-.02170	.06130	.00500	-.00030	.00020	.76230	.51590	1.47760
4.591	31.850	-.19000	.96680	-.02420	.06080	.00490	-.00010	.00010	.79330	.55520	1.42860
4.591	32.620	-.19000	1.00200	-.02620	.06070	.00520	-.00010	.00010	.81540	.58480	1.39410
	GRADIENT	-.00556	.02117	.00106	-.00207	-.00015	-.00002	.00007	.01980	-.00181	.23236

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY003) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1054/ 0 RN/L = 17.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.670	.00000	-.04680	-.01210	.09130	-.00410	.00000	.00020	-.04780	.08300	-.57610
4.591	1.700	.00000	-.02570	-.01150	.08950	-.00400	.00000	.00020	-.02820	.08080	-.34900
4.591	2.780	-.01000	-.00270	-.01040	.08740	-.00380	.00000	.00020	-.00660	.07920	-.08380
4.591	3.840	-.02000	.02030	-.00970	.08540	-.00360	-.00010	.00020	.01500	.07860	.19150
4.591	4.910	-.02000	.04440	-.00890	.08360	-.00310	-.00030	.00020	.03780	.07900	.47840
4.591	6.000	-.03000	.06980	-.00820	.08170	-.00310	-.00040	.00020	.06180	.08050	.76720
4.591	7.100	-.04000	.09680	-.00760	.08010	-.00290	-.00040	.00020	.08710	.08330	1.04600
4.591	8.210	-.04000	.12470	-.00700	.07870	-.00260	-.00040	.00020	.11330	.08760	1.29290
4.591	9.340	-.05000	.15460	-.00700	.07730	-.00230	-.00040	.00010	.14140	.09320	1.51590
4.591	10.480	-.06000	.18600	-.00680	.07600	-.00230	-.00030	.00010	.17060	.10050	1.69680
4.591	11.610	-.06000	.21860	-.00690	.07490	-.00200	-.00030	.00000	.20070	.10930	1.83610
4.591	12.770	-.07000	.25260	-.00710	.07380	-.00170	-.00030	.00000	.23180	.11980	1.93440
4.591	13.950	-.08000	.28800	-.00730	.07280	-.00120	-.00030	.00000	.26400	.13220	1.99660
4.591	15.120	-.09000	.32480	-.00740	.07170	-.00090	-.00030	.00000	.29700	.14610	2.03250
4.591	16.320	-.09000	.36410	-.00750	.07050	-.00030	-.00020	.00000	.33190	.16210	2.04660
4.591	17.510	-.10000	.40490	-.00780	.06940	.00020	-.00010	.00000	.36770	.18030	2.03870
4.591	18.730	-.11000	.44790	-.00800	.06850	.00070	-.00010	.00000	.40470	.20110	2.01260
4.591	19.940	-.12000	.49110	-.00870	.06780	.00130	.00000	.00000	.44130	.22360	1.97330
4.591	21.170	-.12000	.53590	-.00930	.06720	.00160	-.00010	.00000	.47840	.24870	1.92350
4.591	22.400	-.13000	.58330	-.01020	.06660	.00220	-.00010	.00010	.51690	.27640	1.86960
4.591	23.640	-.14000	.63090	-.01130	.06600	.00290	-.00030	.00020	.55460	.30620	1.81080
4.591	24.900	-.15000	.68080	-.01240	.06530	.00370	-.00040	.00030	.59330	.33880	1.75080
4.591	26.180	-.15000	.73270	-.01430	.06440	.00440	-.00050	.00030	.63250	.37410	1.69040
4.591	27.460	-.16000	.78550	-.01650	.06360	.00460	-.00040	.00030	.67120	.41180	1.62980
4.591	28.650	-.17000	.83560	-.01890	.06270	.00500	-.00040	.00040	.70690	.44900	1.57430
4.591	30.000	-.18000	.89390	-.02180	.06170	.00540	-.00040	.00040	.74700	.49390	1.51230
4.591	31.650	-.18000	.96400	-.02490	.06110	.00520	-.00010	.00020	.79250	.55130	1.43740
4.591	32.610	-.19000	1.00300	-.02660	.06040	.00550	-.00010	.00020	.81650	.58490	1.39580
	GRADIENT	-.00566	.02151	.00077	-.00184	.00023	-.00007	.00000	.02019	-.00096	.24953

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY004) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 55/ 0 RN/L = 15.59 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.150	.00000	-.06030	-.01190	.09290	-.00260	-.00010	.00000	-.06050	.08610	-.70320
4.591	.410	.00000	-.05500	-.01160	.09220	-.00290	-.00020	.00010	-.05560	.08510	-.65430
4.591	1.230	.00000	-.03900	-.01080	.09040	-.00310	-.00030	.00010	-.04080	.08280	-.49240
4.591	2.410	-.01000	-.01540	-.00950	.08830	-.00280	-.00030	.00010	-.01880	.08080	-.23300
4.591	3.680	-.02000	.01150	-.00870	.08600	-.00250	-.00040	.00020	.00640	.07970	.08120
4.591	4.940	-.02000	.04000	-.00780	.08380	-.00210	-.00050	.00030	.03320	.08010	.41500
4.591	6.180	-.03000	.06950	-.00730	.08170	-.00210	-.00050	.00030	.06100	.08190	.74520
4.591	7.430	-.04000	.09960	-.00650	.07990	-.00200	-.00050	.00030	.08930	.08520	1.04870
4.591	8.680	-.05000	.13110	-.00570	.07830	-.00190	-.00050	.00030	.11880	.09020	1.31780
4.591	9.930	-.05000	.16430	-.00520	.07670	-.00140	-.00040	.00020	.14990	.09690	1.54680
4.591	11.180	-.06000	.19880	-.00530	.07540	-.00110	-.00040	.00010	.18180	.10550	1.72400
4.591	12.440	-.07000	.23500	-.00530	.07430	-.00080	-.00040	.00010	.21500	.11610	1.85220
4.591	13.700	-.08000	.27370	-.00550	.07310	-.00050	-.00030	.00000	.25030	.12880	1.94340
4.591	14.970	-.09000	.31330	-.00540	.07200	-.00010	-.00020	.00000	.28600	.14340	1.99420
4.591	16.250	-.10000	.35540	-.00550	.07080	.00020	-.00010	.00000	.32350	.16020	2.01840
4.591	17.520	-.10000	.39810	-.00540	.06970	.00060	.00000	.00000	.36090	.17920	2.01330
4.591	18.800	-.11000	.44270	-.00580	.06880	.00110	-.00010	.00000	.39930	.20060	1.98970
4.591	20.080	-.12000	.48790	-.00630	.06800	.00160	-.00010	.00000	.43750	.22430	1.95050
4.591	21.360	-.13000	.53540	-.00680	.06730	.00210	-.00010	.00000	.47690	.25060	1.90290
4.591	22.650	-.13000	.58350	-.00750	.06660	.00280	-.00020	.00020	.51580	.27920	1.84700
4.591	23.940	-.14000	.63330	-.00860	.06600	.00350	-.00040	.00030	.55510	.31040	1.78820
4.591	25.230	-.15000	.68460	-.01010	.06530	.00420	-.00060	.00030	.59470	.34390	1.72900
4.591	26.510	-.16000	.73620	-.01190	.06440	.00470	-.00060	.00030	.63340	.37940	1.66950
4.591	27.790	-.16000	.78960	-.01380	.06350	.00510	-.00060	.00030	.67250	.41750	1.61060
4.591	29.070	-.17000	.84360	-.01600	.06250	.00550	-.00060	.00030	.71070	.45780	1.55240
4.591	30.320	-.18000	.89650	-.01900	.06180	.00560	-.00050	.00020	.74650	.49930	1.49510
4.591	31.390	-.18000	.94460	-.02150	.06150	.00560	-.00040	.00010	.77830	.53810	1.44630
4.591	32.050	-.19000	.97520	-.02320	.06130	.00550	-.00030	.00010	.79810	.56300	1.41760
4.591	32.290	-.19000	.98770	-.02440	.06090	.00560	-.00030	.00010	.80640	.57280	1.40790
	GRADIENT	-.00496	.02080	.00086	-.00188	.00014	-.00007	.00005	.01943	-.00130	.23239

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY005) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1055/ 0 RN/L = 16.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.110	.00000	-.06410	-.01220	.09310	-.00360	-.00020	.00020	-.06390	.08560	-.74620
4.591	.820	.00000	-.04540	-.01180	.09120	-.00370	-.00020	.00020	-.04660	.08290	-.56240
4.591	1.790	.00000	-.02560	-.01120	.08940	-.00370	-.00020	.00020	-.02820	.08090	-.34890
4.591	2.770	-.01000	-.00470	-.01040	.08760	-.00360	-.00030	.00020	-.00850	.07950	-.10760
4.591	3.760	-.02000	.01720	-.00950	.08580	-.00350	-.00040	.00020	.01200	.07890	.15290
4.591	4.750	-.02000	.03940	-.00880	.08390	-.00310	-.00050	.00020	.03300	.07900	.41770
4.591	5.770	-.03000	.06360	-.00820	.08220	-.00290	-.00060	.00020	.05580	.08030	.69490
4.591	6.780	-.03000	.08800	-.00750	.08060	-.00290	-.00060	.00020	.07880	.08250	.95460
4.591	7.820	-.04000	.11390	-.00690	.0793.	-.00250	-.00060	.00020	.10310	.08610	1.19800
4.591	8.870	-.05000	.14120	-.00650	.07800	-.00210	-.00060	.00020	.12870	.09090	1.41660
4.591	9.910	-.05000	.16910	-.00620	.07680	-.00190	-.00050	.00010	.15470	.09680	1.59870
4.591	10.960	-.06000	.19840	-.00610	.07570	-.00170	-.00040	.00010	.18190	.10410	1.74740
4.591	12.030	-.07000	.22960	-.00630	.07460	-.00140	-.00040	.00000	.21060	.11290	1.86470
4.591	13.120	-.07000	.26160	-.00670	.07370	-.00100	-.00040	.00000	.23980	.12330	1.94470
4.591	14.210	-.08000	.29520	-.00660	.07280	-.00080	-.00040	.00000	.27020	.13520	1.99790
4.591	15.300	-.09000	.33090	-.00680	.07180	-.00040	-.00030	.00000	.30230	.14880	2.03060
4.591	16.420	-.10000	.36760	-.00660	.07060	.00000	-.00020	.00000	.33480	.16410	2.04030
4.591	17.530	-.10000	.40560	-.00680	.06970	.00050	-.00020	.00000	.36810	.18110	2.03220
4.591	18.660	-.11000	.44470	-.00730	.06890	.00100	-.00020	.00000	.40180	.20000	2.00810
4.591	19.790	-.12000	.48520	-.00750	.06820	.00140	-.00020	.00000	.43610	.22100	1.97260
4.591	20.930	-.12000	.52640	-.00830	.06750	.00190	-.00020	.00000	.47030	.24380	1.92920
4.591	22.080	-.13000	.56950	-.00890	.06710	.00240	-.00020	.00010	.50550	.26890	1.87930
4.591	23.230	-.14000	.61390	-.00970	.06650	.00320	-.00040	.00020	.54090	.29610	1.82640
4.591	24.410	-.14000	.65960	-.01100	.06580	.00370	-.00060	.00030	.57660	.32550	1.77140
4.591	25.570	-.15000	.70650	-.01280	.06490	.00440	-.00060	.00030	.61250	.35670	1.71710
4.591	26.760	-.16000	.75530	-.01440	.06400	.00480	-.00070	.00030	.64890	.39060	1.66120
4.591	27.950	-.16000	.80520	-.01620	.06340	.00520	-.00050	.00030	.68500	.42680	1.60500
4.591	29.080	-.17000	.85260	-.01820	.06240	.00560	-.00050	.00030	.71830	.46250	1.55290
4.591	30.400	-.18000	.90960	-.02160	.06160	.00570	-.00040	.00030	.75700	.50710	1.49260
4.591	31.760	-.18000	.96800	-.02400	.06110	.00570	-.00030	.00020	.79470	.55520	1.43120
4.591	32.300	-.19000	.98930	-.02510	.06080	.00560	-.00030	.00010	.80770	.57380	1.40760
	GRADIENT	-.00500	.02130	.00073	-.00188	.00009	-.00006	.00000	.01995	-.00136	.24081

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OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (RHY006) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 56/ 0 RN/L = 15.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.580	.00000	-.05300	-.01260	.09250	-.00510	-.00030	.00030	-.05380	.08560	-.62920
4.591	1.940	.00000	-.02730	-.01250	.09040	-.00360	-.00010	.00020	-.03010	.08300	-.36340
4.591	3.060	-.01000	-.00180	-.00980	.08750	-.00340	-.00020	.00010	-.00610	.08060	-.07670
4.591	4.090	-.02000	.02070	-.00880	.08530	-.00290	-.00020	.00020	.01500	.07990	.18830
4.591	5.170	-.02000	.04640	-.00790	.08310	-.00240	-.00040	.00030	.03930	.08020	.48980
4.591	6.230	-.03000	.07190	-.00780	.08130	-.00260	-.00040	.00020	.06330	.08180	.77410
4.591	7.310	-.04000	.09800	-.00760	.07990	-.00290	-.00050	.00020	.08790	.08480	1.03640
4.591	8.390	-.04000	.12530	-.00670	.07860	-.00250	-.00050	.00020	.11350	.08910	1.27330
4.591	9.470	-.05000	.15380	-.00660	.07730	-.00220	-.00040	.00020	.14020	.09450	1.48240
4.591	10.550	-.06000	.18340	-.00630	.07610	-.00190	-.00040	.00010	.16770	.10130	1.65500
4.591	11.630	-.07000	.21380	-.00600	.07500	-.00170	-.00030	.00010	.19570	.10930	1.78960
4.591	12.700	-.07000	.24580	-.00620	.07400	-.00130	-.00030	.00010	.22520	.11900	1.89180
4.591	13.790	-.08000	.27830	-.00650	.07300	-.00090	-.00030	.00000	.25460	.13010	1.95690
4.591	14.890	-.09000	.31270	-.00660	.07220	-.00060	-.00020	.00000	.28550	.14280	1.99880
4.591	15.970	-.09000	.34780	-.00690	.07110	-.00020	-.00010	.00000	.31690	.15680	2.02120
4.591	17.060	-.10000	.38430	-.00680	.07010	.00000	-.00010	.00000	.34900	.17250	2.02280
4.591	18.150	-.11000	.42230	-.00710	.06930	.00050	-.00010	.00000	.38210	.19010	2.00920
4.591	19.240	-.11000	.45990	-.00720	.06840	.00090	.00000	.00000	.41420	.20900	1.98180
4.591	20.330	-.12000	.49980	-.00760	.06780	.00140	-.00010	.00000	.44770	.23010	1.94540
4.591	21.430	-.13000	.54020	-.00820	.06730	.00170	-.00010	.00000	.48110	.25280	1.90260
4.591	22.520	-.13000	.58180	-.00890	.06680	.00230	-.00020	.00010	.51480	.27760	1.85450
4.591	23.600	-.14000	.62300	-.01020	.06630	.00290	-.00040	.00020	.54740	.30310	1.80610
4.591	24.690	-.14000	.66560	-.01150	.06550	.00350	-.00060	.00020	.58060	.33050	1.75650
4.591	25.770	-.15000	.70960	-.01330	.06460	.00400	-.00070	.00020	.61420	.35980	1.70720
4.591	26.860	-.16000	.75420	-.01520	.06380	.00420	-.00070	.00020	.64750	.39080	1.65670
4.591	27.930	-.16000	.79900	-.01690	.06320	.00440	-.00060	.00020	.67990	.42330	1.60600
4.591	29.000	-.17000	.84470	-.01880	.06250	.00480	-.00060	.00020	.71220	.45750	1.55670
4.591	30.060	-.17000	.88980	-.02150	.06170	.00500	-.00060	.00030	.74310	.49250	1.50870
4.591	31.100	-.18000	.93550	-.02380	.06110	.00500	-.00040	.00010	.77330	.52920	1.46130
4.591	32.100	-.19000	.97960	-.02620	.06060	.00490	-.00030	.00000	.80160	.56570	1.41700
4.591	32.660	-.19000	1.00550	-.02750	.06040	.00500	-.00030	.00000	.81780	.58730	1.39240
	GRADIENT	-.00585	.02111	.00119	-.00209	.00060	.00002	-.00004	.01972	-.00169	.23411

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (RHY007) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1056/ 0 RN/L = 16.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-1.500	.01000	-.09100	-.01320	.09600	-.00360	-.00020	.00030	-.08860	.09090	-.97470
4.591	-.690	.00000	-.07450	-.01280	.09410	-.00370	-.00030	.00020	-.07340	.08750	-.83920
4.591	.360	.00000	-.05360	-.01220	.09180	-.00380	-.00020	.00020	-.05420	.08390	-.64570
4.591	1.440	.00000	-.03170	-.01160	.08980	-.00370	-.00020	.00020	-.03370	.08130	-.41520
4.591	2.530	-.01000	-.00850	-.01080	.08770	-.00350	-.00030	.00020	-.01200	.07950	-.15150
4.591	3.650	-.01000	.01630	-.00990	.08560	-.00340	-.00040	.00020	.01130	.07880	.14440
4.591	4.790	-.02000	.04160	-.00930	.08360	-.00310	-.00050	.00020	.03510	.07910	.44470
4.591	5.980	-.03000	.07000	-.00870	.08160	-.00300	-.00060	.00020	.06190	.08070	.76720
4.591	7.200	-.04000	.10000	-.00850	.07990	-.00290	-.00070	.00020	.09020	.08410	1.07210
4.591	8.420	-.04000	.13150	-.00760	.07840	-.00260	-.00060	.00020	.11970	.08900	1.34440
4.591	9.650	-.05000	.16460	-.00730	.07690	-.00250	-.00050	.00010	.15070	.09570	1.57410
4.591	10.900	-.06000	.19800	-.00690	.07550	-.00210	-.00050	.00010	.18160	.10400	1.74620
4.591	12.140	-.07000	.23490	-.00740	.07430	-.00170	-.00050	.00010	.21560	.11450	1.88260
4.591	13.410	-.08000	.27260	-.00750	.07320	-.00120	-.00040	.00000	.24990	.12690	1.96930
4.591	14.680	-.08000	.31280	-.00800	.07210	-.00080	-.00040	.00000	.28620	.14160	2.02110
4.591	15.950	-.09000	.35420	-.00810	.07090	-.00040	-.00030	.00000	.32310	.15820	2.04180
4.591	17.240	-.10000	.39780	-.00820	.06980	.00000	-.00020	.00000	.36150	.17730	2.03880
4.591	18.550	-.11000	.44340	-.00870	.06880	.00060	-.00010	.00000	.40090	.19900	2.01380
4.591	19.850	-.12000	.49010	-.00930	.06800	.00100	-.00010	.00000	.44040	.22320	1.97330
4.591	21.160	-.12000	.53840	-.00970	.06730	.00170	-.00020	.00000	.48050	.25010	1.92150
4.591	22.500	-.13000	.58930	-.01090	.06660	.00230	-.00030	.00010	.52180	.28020	1.86200
4.591	23.840	-.14000	.64130	-.01250	.06580	.00300	-.00050	.00020	.56300	.31260	1.80070
4.591	25.190	-.15000	.69480	-.01460	.06480	.00370	-.00060	.00030	.60430	.34780	1.73730
4.591	26.550	-.16000	.75090	-.01670	.06390	.00440	-.00070	.00030	.64640	.38630	1.67300
4.591	27.900	-.16000	.80720	-.01920	.06300	.00460	-.00060	.00030	.68730	.42690	1.60980
4.591	29.260	-.17000	.86500	-.02170	.06220	.00500	-.00060	.00030	.72780	.47070	1.54610
4.591	30.550	-.18000	.91970	-.02410	.06170	.00510	-.00050	.00020	.76440	.51440	1.48590
4.591	31.610	-.18000	.96420	-.02570	.06120	.00510	-.00030	.00010	.79290	.55140	1.43790
4.591	32.290	-.19000	.99250	-.02710	.06100	.00530	-.00020	.00010	.81020	.57570	1.40720
4.591	32.670	-.19000	1.00720	-.02770	.06040	.00510	-.00030	.00000	.81910	.58840	1.39220
	GRADIENT	-.00403	.02103	.00064	-.00196	.00008	-.00004	-.00001	.01962	-.00190	.22680

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY008) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 1.000 A-SCHD = 1.000
PHI = .000

RUN NO. 34/ 0 RN/L = 17.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-2.570	.02000	-.10870	-.01450	.09780	-.00410	-.00040	.00000	-.10450	.09540	-1.09520
4.591	-1.160	.01000	-.08170	-.01290	.09370	-.00370	-.00040	.00000	-.07990	.08810	-.90710
4.591	-.060	.00000	-.05890	-.01210	.09080	-.00300	-.00040	.00000	-.05880	.08350	-.70360
4.591	.950	.00000	-.03850	-.01180	.08880	-.00320	-.00030	-.00010	-.03980	.08080	-.49330
4.591	2.000	-.01000	-.01710	-.01100	.08720	-.00220	-.00040	.00000	-.01990	.07910	-.25220
4.591	3.050	-.01000	.00460	-.01000	.08550	-.00290	-.00030	-.00010	.00050	.07810	.00670
4.591	4.100	-.02000	.02800	-.00910	.08350	-.00280	-.00030	-.00010	.02240	.07780	.28900
4.591	5.150	-.02000	.05130	-.00850	.08190	-.00260	-.00050	-.00010	.04440	.07860	.56470
4.591	6.210	-.03000	.07640	-.00770	.08010	-.00220	-.00050	-.00010	.06810	.08030	.84790
4.591	7.270	-.04000	.10180	-.00700	.07860	-.00200	-.00040	-.00010	.09200	.08320	1.10590
4.591	8.340	-.05000	.12920	-.00660	.07730	-.00160	-.00040	-.00010	.11780	.08750	1.34490
4.591	9.410	-.05000	.15590	-.00630	.07620	-.00150	-.00030	-.00020	.14260	.09280	1.53580
4.591	10.480	-.06000	.18560	-.00610	.07510	-.00140	-.00030	-.00020	.17030	.09980	1.70600
4.591	11.550	-.07000	.21540	-.00620	.07400	-.00120	-.00030	-.00020	.19780	.10780	1.83400
4.591	12.620	-.07000	.24630	-.00670	.07310	-.00090	-.00030	-.00020	.22620	.11720	1.92980
4.591	13.680	-.08000	.27820	-.00670	.07210	-.00040	-.00030	-.00020	.25510	.12790	1.99380
4.591	14.750	-.09000	.31070	-.00680	.07120	-.00010	-.00030	-.00030	.28440	.14010	2.03020
4.591	15.820	-.09000	.34490	-.00700	.07040	.00020	-.00020	-.00030	.31490	.15380	2.04640
4.591	16.900	-.10000	.37930	-.00690	.06950	.00070	-.00020	-.00030	.34510	.16880	2.04400
4.591	17.970	-.11000	.41590	-.00740	.06870	.00120	-.00030	-.00030	.37690	.18580	2.02770
4.591	19.060	-.11000	.45320	-.00790	.06820	.00170	-.00030	-.00030	.40870	.20460	1.99740
4.591	20.140	-.12000	.49060	-.00830	.06750	.00210	-.00030	-.00030	.44020	.22450	1.96020
4.591	21.220	-.13000	.52880	-.00900	.06690	.00260	-.00030	-.00030	.47170	.24600	1.91720
4.591	22.290	-.13000	.56900	-.00960	.06620	.00320	-.00030	-.00020	.50440	.26950	1.87190
4.591	23.370	-.14000	.60990	-.01020	.06590	.00380	-.00040	-.00010	.53690	.29480	1.82090
4.591	24.450	-.14000	.65090	-.01130	.06550	.00430	-.00040	.00000	.56880	.32150	1.76920
4.591	25.520	-.15000	.69360	-.01230	.06490	.00500	-.00050	.00000	.60140	.35000	1.71810
4.591	26.580	-.16000	.73640	-.01410	.06430	.00550	-.00050	.00000	.63340	.37970	1.66800
4.591	27.660	-.16000	.78080	-.01610	.06360	.00620	-.00050	.00000	.66590	.41150	1.61780
4.591	28.720	-.17000	.82590	-.01790	.06300	.00700	-.00050	.00000	.69790	.44500	1.56830
4.591	29.760	-.17000	.86920	-.02030	.06230	.00750	-.00070	.00010	.72760	.47850	1.52060
4.591	30.790	-.18000	.91410	-.02240	.06190	.00780	-.00060	.00000	.75780	.51410	1.47390
4.591	31.780	-.19000	.95770	-.02470	.06170	.00770	-.00040	.00000	.78580	.55000	1.42860
4.591	32.560	-.19000	.99280	-.02640	.06160	.00790	-.00030	.00000	.80790	.57950	1.39410
	GRADIENT	-.00560	.02047	.00076	-.00208	.00021	.00002	-.00002	.01902	-.00257	.20991

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY009) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 2.000 A-SCHD = 1.000
PHI = .000

RUN NO. 35/ 0 RN/L = 17.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.700	.00000	-.04610	-.01200	.09080	-.00030	-.00030	-.00010	-.04710	.08320	-.56660
4.591	2.170	-.01000	-.01610	-.01030	.08720	-.00040	-.00060	-.00010	-.01910	.07940	-.24110
4.591	3.530	-.01000	.01460	-.00890	.08430	-.00140	-.00060	-.00010	.00980	.07790	.12600
4.591	4.790	-.02000	.04250	-.00840	.08200	-.00140	-.00070	.00000	.03610	.07800	.46300
4.591	6.070	-.03000	.07190	-.00790	.07980	-.00150	-.00070	-.00010	.06380	.07960	.80130
4.591	7.370	-.04000	.10330	-.00720	.07820	-.00120	-.00060	-.00010	.09340	.08350	1.11840
4.591	8.670	-.05000	.13640	-.00690	.07700	-.00050	-.00050	.00000	.12440	.08930	1.39280
4.591	9.970	-.06000	.17050	-.00660	.07550	-.00070	-.00050	-.00010	.15620	.09640	1.61990
4.591	11.280	-.06000	.20650	-.00670	.07430	-.00100	-.00040	-.00020	.18950	.10570	1.79230
4.591	12.580	-.07000	.24450	-.00670	.07310	-.00060	-.00040	-.00020	.22430	.11700	1.91770
4.591	13.870	-.08000	.28380	-.00690	.07200	-.00020	-.00040	-.00030	.26010	.13030	1.99570
4.591	15.190	-.09000	.32460	-.00690	.07100	.00010	-.00040	-.00030	.29670	.14590	2.03250
4.591	16.500	-.10000	.36720	-.00690	.06980	.00070	-.00040	-.00030	.33450	.16360	2.04410
4.591	17.820	-.10000	.41100	-.00710	.06890	.00140	-.00030	-.00030	.37260	.18380	2.02760
4.591	19.130	-.11000	.45620	-.00750	.06800	.00200	-.00040	-.00030	.41140	.20630	1.99410
4.591	20.450	-.12000	.50250	-.00810	.06720	.00230	-.00040	-.00030	.45010	.23110	1.94770
4.591	21.770	-.13000	.54990	-.00880	.06650	.00290	-.00040	-.00030	.48900	.25820	1.89380
4.591	23.090	-.14000	.60030	-.00970	.06590	.00370	-.00050	-.00020	.52950	.28860	1.83410
4.591	24.400	-.14000	.65040	-.01070	.06550	.00460	-.00070	.00000	.56860	.32100	1.77090
4.591	25.710	-.15000	.70240	-.01220	.06470	.00540	-.00070	.00000	.60830	.35590	1.70920
4.591	27.030	-.16000	.75590	-.01420	.06400	.00610	-.00070	.00000	.64790	.39340	1.64650
4.591	28.330	-.17000	.81050	-.01630	.06320	.00690	-.00070	.00000	.68720	.43330	1.58600
4.591	29.610	-.17000	.86420	-.01860	.06230	.00770	-.00080	.00000	.72450	.47430	1.52750
4.591	30.900	-.18000	.91850	-.02140	.06190	.00780	-.00070	.00000	.76040	.51800	1.46780
4.591	32.110	-.19000	.97080	-.02390	.06140	.00780	-.00060	.00000	.79380	.56140	1.41400
4.591	32.740	-.19000	1.00010	-.02540	.06120	.00790	-.00040	.00000	.81230	.58590	1.38640
	GRADIENT	-.00440	.02174	.00090	-.00215	-.00032	-.00009	.00002	.02042	-.00128	.25318

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY010) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 2.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1035/ 0 RN/L = 18.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.330	.00000	-.05070	-.01230	.09050	-.00330	-.00040	.00000	-.05120	.08220	-.62290
4.591	1.300	.00000	-.03080	-.01150	.08860	-.00320	-.00040	-.00010	-.03270	.07990	-.40950
4.591	2.460	-.01000	-.00700	-.01040	.08650	-.00280	-.00050	-.00010	-.01040	.07800	-.13380
4.591	3.610	-.01000	.01810	-.00960	.08430	-.00260	-.00060	-.00010	.01330	.07710	.17240
4.591	4.790	-.02000	.04470	-.00880	.08210	-.00220	-.00070	-.00010	.03830	.07730	.49610
4.591	5.990	-.03000	.07220	-.00830	.08010	-.00200	-.00070	-.00020	.06430	.07900	.81310
4.591	7.210	-.04000	.10210	-.00780	.07850	-.00190	-.00070	-.00020	.09240	.08250	1.11960
4.591	8.470	-.05000	.13380	-.00730	.07710	-.00160	-.00060	-.00020	.12220	.08770	1.39220
4.591	9.710	-.05000	.16630	-.00730	.07570	-.00140	-.00050	-.00020	.15260	.09450	1.61470
4.591	10.990	-.06000	.20120	-.00720	.07440	-.00120	-.00050	-.00020	.18490	.10330	1.79000
4.591	12.270	-.07000	.23750	-.00740	.07320	-.00080	-.00050	-.00020	.21830	.11390	1.91560
4.591	13.560	-.08000	.27590	-.00760	.07210	-.00040	-.00060	-.00030	.25330	.12670	1.99770
4.591	14.850	-.09000	.31630	-.00770	.07100	.00000	-.00050	-.00030	.28960	.14190	2.04090
4.591	16.170	-.09000	.35900	-.00780	.06990	.00060	-.00050	-.00030	.32760	.15930	2.05640
4.591	17.520	-.10000	.40330	-.00800	.06880	.00120	-.00050	-.00030	.36630	.17920	2.04360
4.591	18.850	-.11000	.44920	-.00870	.06800	.00180	-.00040	-.00030	.40570	.20180	2.00970
4.591	20.210	-.12000	.49680	-.00890	.06720	.00230	-.00050	-.00030	.44580	.22710	1.96290
4.591	21.590	-.13000	.54670	-.00980	.06660	.00280	-.00050	-.00030	.48680	.25560	1.90420
4.591	22.950	-.13000	.59880	-.01080	.06580	.00360	-.00060	-.00020	.52880	.28660	1.84370
4.591	24.340	-.14000	.65260	-.01220	.06540	.00450	-.00070	.00000	.57090	.32130	1.77690
4.591	25.760	-.15000	.71000	-.01380	.06470	.00550	-.00070	.00000	.61470	.35970	1.70870
4.591	27.190	-.16000	.76750	-.01560	.06390	.00640	-.00060	.00000	.65710	.40050	1.64040
4.591	28.480	-.17000	.82200	-.01850	.06300	.00720	-.00070	.00000	.69620	.44050	1.58040
4.591	30.070	-.18000	.88990	-.02150	.06210	.00790	-.00070	.00010	.74290	.49290	1.50730
4.591	31.840	-.19000	.96410	-.02460	.06180	.00810	-.00040	.00000	.79050	.55440	1.42580
4.591	32.580	-.19000	.99500	-.02600	.06100	.00830	-.00040	.00000	.80970	.58060	1.39450
	GRADIENT	-.00448	.02136	.00079	-.00188	.00025	-.00007	-.00002	.02005	-.00111	.25144

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY011) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 37/ 0 RN/L = 16.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.390	.00000	-.05270	-.01130	.09080	-.00170	-.00050	.00000	-.05320	.08330	-.63960
4.591	.710	.00000	-.04770	-.01150	.09040	-.00140	-.00040	.00000	-.04880	.08260	-.59100
4.591	1.600	.00000	-.03070	-.01180	.08920	-.00200	-.00040	.00000	-.03300	.08100	-.40690
4.591	2.810	-.01000	-.00550	-.01050	.08700	-.00230	-.00040	.00000	-.00940	.07930	-.11910
4.591	4.070	-.02000	.02250	-.00920	.08460	-.00200	-.00030	.00000	.01690	.07860	.21550
4.591	5.330	-.03000	.05170	-.00790	.08230	-.00160	-.00030	-.00010	.04450	.07940	.56090
4.591	6.590	-.04000	.08220	-.00670	.08010	-.00120	-.00030	-.00010	.07330	.08170	.89830
4.591	7.840	-.04000	.11580	-.00690	.07850	-.00150	-.00030	.00000	.10500	.08610	1.21910
4.591	9.100	-.05000	.14900	-.00730	.07710	-.00210	-.00040	.00000	.13610	.09220	1.47550
4.591	10.350	-.06000	.18280	-.00720	.07580	-.00180	-.00040	.00000	.16750	.09990	1.67660
4.591	11.620	-.07000	.21570	-.00660	.07430	-.00070	-.00050	.00000	.19790	.10880	1.81900
4.591	12.870	-.07000	.25100	-.00610	.07300	.00010	-.00050	.00000	.23010	.11950	1.92440
4.591	14.120	-.08000	.29030	-.00620	.07210	.00060	-.00040	.00000	.26580	.13320	1.99580
4.591	15.400	-.09000	.33120	-.00580	.07130	.00110	-.00010	-.00010	.30240	.14910	2.02770
4.591	16.680	-.10000	.37320	-.00580	.07020	.00150	.00000	-.00020	.33960	.16680	2.03530
4.591	17.950	-.11000	.41590	-.00610	.06920	.00190	-.00010	-.00020	.37670	.18650	2.01950
4.591	19.240	-.11000	.46030	-.00660	.06830	.00230	-.00020	-.00030	.41470	.20860	1.98730
4.591	20.530	-.12000	.50660	-.00680	.06750	.00260	-.00030	-.00030	.45360	.23340	1.94300
4.591	21.810	-.13000	.55400	-.00730	.06690	.00300	-.00040	-.00030	.49240	.26050	1.89000
4.591	23.100	-.14000	.60340	-.00820	.06640	.00380	-.00050	-.00010	.53210	.29050	1.83160
4.591	24.380	-.14000	.65310	-.00930	.06580	.00470	-.00060	.00000	.57100	.32230	1.77130
4.591	25.660	-.15000	.70460	-.01110	.06510	.00550	-.00060	.00010	.61030	.35660	1.71130
4.591	26.960	-.16000	.75740	-.01320	.06440	.00600	-.00060	.00010	.64950	.39370	1.64980
4.591	28.240	-.17000	.81240	-.01540	.06340	.00680	-.00070	.00010	.68940	.43320	1.59120
4.591	29.490	-.17000	.86480	-.01820	.06260	.00730	-.00070	.00010	.72590	.47330	1.53360
4.591	30.690	-.18000	.91660	-.02050	.06250	.00750	-.00060	.00000	.76030	.51470	1.47700
4.591	31.600	-.19000	.95670	-.02240	.06240	.00780	-.00040	.00000	.78630	.54770	1.43540
4.591	32.080	-.19000	.97990	-.02380	.06200	.00790	-.00040	.00000	.80150	.56620	1.41560
	GRADIENT	-.00558	.02051	.00060	-.00169	-.00016	.00004	.00000	.01914	-.00130	.23333

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY012) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1037/ 0 RN/L = 17.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.330	.00000	-.05200	-.01230	.09090	-.00300	-.00040	.00000	-.05250	.08260	-.63550
4.591	.970	.00000	-.03890	-.01190	.08970	-.00300	-.00040	.00000	-.04030	.08100	-.49780
4.591	1.760	.00000	-.02240	-.01130	.08830	-.00300	-.00040	-.00010	-.02480	.07940	-.31330
4.591	2.590	-.01000	-.00520	-.01070	.08670	-.00290	-.00050	-.00010	-.00880	.07820	-.11270
4.591	3.410	-.01000	.01310	-.01010	.08520	-.00290	-.00060	-.00010	.00840	.07760	.10930
4.591	4.250	-.02000	.03180	-.00930	.08370	-.00260	-.00060	-.00010	.02620	.07760	.33750
4.591	5.110	-.02000	.05120	-.00860	.08220	-.00230	-.00070	-.00010	.04440	.07820	.56850
4.591	5.970	-.03000	.07180	-.00790	.08080	-.00230	-.00060	-.00010	.06380	.07950	.80270
4.591	6.840	-.03000	.09370	-.00750	.07970	-.00230	-.00050	-.00010	.08460	.08190	1.03230
4.591	7.750	-.04000	.11700	-.00780	.07870	-.00240	-.00060	-.00010	.10650	.08540	1.24660
4.591	8.650	-.05000	.14140	-.00820	.07780	-.00260	-.00050	-.00010	.12930	.08970	1.44110
4.591	9.560	-.05000	.16690	-.00870	.07690	-.00280	-.00050	-.00010	.15320	.09520	1.60900
4.591	10.470	-.06000	.19090	-.00830	.07580	-.00240	-.00040	-.00010	.17540	.10090	1.73810
4.591	11.370	-.06000	.21490	-.00790	.07480	-.00160	-.00050	-.00020	.19760	.10740	1.83980
4.591	12.330	-.07000	.24060	-.00740	.07370	-.00070	-.00050	-.00020	.22110	.11510	1.92020
4.591	13.260	-.08000	.26890	-.00750	.07280	-.00030	-.00050	-.00020	.24690	.12430	1.98550
4.591	14.200	-.08000	.29790	-.00740	.07210	.00000	-.00050	-.00020	.27320	.13480	2.02540
4.591	15.150	-.09000	.32820	-.00740	.07120	.00020	-.00040	-.00020	.30030	.14650	2.04970
4.591	16.110	-.09000	.35910	-.00720	.07050	.00080	-.00030	-.00020	.32770	.15940	2.05560
4.591	17.090	-.10000	.39180	-.00750	.06950	.00100	-.00030	-.00030	.35650	.17370	2.05180
4.591	18.060	-.11000	.42470	-.00770	.06890	.00160	-.00030	-.00030	.38500	.18940	2.03270
4.591	19.040	-.11000	.45930	-.00830	.06830	.00200	-.00030	-.00030	.41450	.20660	2.00590
4.591	20.030	-.12000	.49420	-.00880	.06760	.00230	-.00030	-.00030	.44390	.22510	1.97200
4.591	21.040	-.12000	.53120	-.00890	.06710	.00270	-.00030	-.00030	.47460	.24570	1.93140
4.591	22.050	-.13000	.56870	-.00940	.06660	.00320	-.00040	-.00020	.50520	.26770	1.88700
4.591	23.030	-.14000	.60610	-.01020	.06630	.00390	-.00050	-.00010	.53500	.29070	1.84020
4.591	24.060	-.14000	.64670	-.01080	.06590	.00470	-.00060	.00000	.56700	.31650	1.79140
4.591	25.090	-.15000	.68760	-.01210	.06540	.00540	-.00060	.00010	.59840	.34360	1.74140
4.591	26.110	-.15000	.72990	-.01360	.06480	.00590	-.00060	.00010	.63040	.37230	1.69300
4.591	27.150	-.16000	.77260	-.01550	.06410	.00620	-.00060	.00010	.66180	.40260	1.64380
4.591	28.160	-.17000	.81580	-.01740	.06340	.00690	-.00060	.00010	.69310	.43350	1.59700
4.591	29.180	-.17000	.85900	-.01950	.06260	.00760	-.00080	.00020	.72320	.46660	1.54970
4.591	30.300	-.18000	.90770	-.02200	.06210	.00760	-.00050	.00000	.75630	.50480	1.49810
4.591	31.490	-.18000	.95840	-.02410	.06200	.00810	-.00040	.00010	.78890	.54680	1.44260
4.591	32.210	-.19000	.98770	-.02530	.06180	.00770	-.00040	.00000	.80690	.57210	1.41030
	GRADIENT	-.00511	.02135	.00076	-.00184	.00009	-.00006	-.00003	.02003	-.00130	.24856

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY013) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 38/ 0 RN/L = 16.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.550	.00000	-.04960	-.01340	.09070	-.00290	-.00060	.00000	-.05040	.08270	-.60990
4.591	1.800	.00000	-.02400	-.01220	.08840	-.00270	-.00060	-.00010	-.02660	.08000	-.33240
4.591	2.750	-.01000	-.00380	-.01120	.08680	-.00290	-.00060	-.00010	-.00760	.07890	-.09740
4.591	3.670	-.01000	.01580	-.01040	.08510	-.00280	-.00070	-.00010	.01080	.07830	.13850
4.591	4.600	-.02000	.03670	-.00960	.08350	-.00230	-.00080	-.00010	.03050	.07840	.38900
4.591	5.540	-.03000	.05800	-.00890	.08180	-.00190	-.00090	-.00010	.05060	.07930	.63840
4.591	6.480	-.03000	.08040	-.00840	.08030	-.00200	-.00080	-.00010	.07170	.08110	.88440
4.591	7.410	-.04000	.10280	-.00770	.07910	-.00200	-.00080	-.00010	.09270	.08390	1.10510
4.591	8.370	-.04000	.12710	-.00700	.07800	-.00160	-.00080	-.00010	.11560	.08770	1.31700
4.591	9.300	-.05000	.15160	-.00670	.07710	-.00130	-.00070	-.00010	.13840	.09260	1.49480
4.591	10.240	-.06000	.17650	-.00650	.07600	-.00130	-.00060	-.00010	.16170	.09820	1.64590
4.591	11.180	-.06000	.20260	-.00650	.07520	-.00120	-.00060	-.00020	.18570	.10500	1.76890
4.591	12.130	-.07000	.22980	-.00660	.07420	-.00080	-.00060	-.00020	.21080	.11280	1.86900
4.591	13.080	-.07000	.25760	-.00650	.07340	-.00040	-.00060	-.00020	.23620	.12160	1.94130
4.591	14.030	-.08000	.28720	-.00650	.07260	.00000	-.00060	-.00020	.26310	.13190	1.99360
4.591	14.980	-.09000	.31680	-.00630	.07180	.00040	-.00050	-.00020	.28960	.14310	2.02320
4.591	15.930	-.09000	.34780	-.00630	.07090	.00080	-.00040	-.00020	.31730	.15550	2.03930
4.591	16.890	-.10000	.37920	-.00630	.07010	.00120	-.00040	-.00020	.34490	.16910	2.03940
4.591	17.840	-.11000	.41200	-.00680	.06930	.00170	-.00030	-.00030	.37350	.18420	2.02760
4.591	18.790	-.11000	.44500	-.00700	.06870	.00220	-.00030	-.00030	.40190	.20040	2.00530
4.591	19.740	-.12000	.47880	-.00710	.06800	.00260	-.00030	-.00030	.43050	.21780	1.97620
4.591	20.690	-.12000	.51270	-.00730	.06740	.00300	-.00030	-.00030	.45880	.23630	1.94120
4.591	21.640	-.13000	.54820	-.00760	.06700	.00350	-.00030	-.00020	.48790	.25660	1.90160
4.591	22.600	-.13000	.58350	-.00850	.06650	.00400	-.00040	-.00010	.51640	.27780	1.85900
4.591	23.550	-.14000	.62080	-.00910	.06620	.00450	-.00050	.00000	.54600	.30100	1.81400
4.591	24.490	-.14000	.65740	-.00990	.06580	.00500	-.00060	.00000	.57440	.32480	1.76860
4.591	25.440	-.15000	.69570	-.01130	.06520	.00550	-.00070	.00010	.60380	.35020	1.72430
4.591	26.390	-.16000	.73380	-.01270	.06470	.00580	-.00080	.00010	.63230	.37650	1.67910
4.591	27.320	-.16000	.77310	-.01440	.06410	.00630	-.00080	.00010	.66130	.40430	1.63580
4.591	28.240	-.17000	.81220	-.01590	.06350	.00670	-.00080	.00010	.68930	.43300	1.59210
4.591	29.180	-.17000	.85200	-.01760	.06290	.00760	-.00090	.00020	.71730	.46300	1.54910
4.591	30.090	-.18000	.89080	-.01980	.06240	.00760	-.00080	.00020	.74360	.49350	1.50670
4.591	30.990	-.18000	.92950	-.02170	.06230	.00740	-.00060	.00000	.76900	.52500	1.46460
4.591	31.870	-.19000	.96890	-.02400	.06210	.00770	-.00050	.00000	.79440	.55730	1.42540
4.591	32.560	-.19000	.99650	-.02550	.06180	.00800	-.00050	.00000	.81360	.58310	1.39530
	GRADIENT	-.00493	.02128	.00094	-.00178	.00011	-.00005	-.00002	.01996	-.00106	.24700

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OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY014) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1038/ 0 RN/L = 17.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.290	.00000	-.05410	-.01340	.09140	-.00310	-.00070	.00000	-.05450	.08280	-.65910
4.591	.730	.00000	-.04450	-.01320	.09050	-.00310	-.00070	-.00010	-.04550	.08160	-.55820
4.591	1.520	.00000	-.02800	-.01240	.08900	-.00300	-.00070	-.00010	-.03010	.07980	-.37780
4.591	2.520	-.01000	-.00640	-.01160	.08700	-.00270	-.00080	-.00010	-.00990	.07820	-.12650
4.591	3.590	-.01000	.01690	-.01080	.08500	-.00240	-.00080	-.00010	.01210	.07750	.15670
4.591	4.730	-.02000	.04260	-.01020	.08300	-.00220	-.00090	-.00010	.03630	.07780	.46690
4.591	5.890	-.03000	.06960	-.00900	.08110	-.00210	-.00100	-.00010	.06180	.07930	.77910
4.591	7.090	-.04000	.09900	-.00850	.07940	-.00180	-.00100	-.00010	.08940	.08260	1.08300
4.591	8.300	-.04000	.12980	-.00790	.07800	-.00150	-.00090	-.00010	.11840	.08750	1.35330
4.591	9.510	-.05000	.16200	-.00760	.07670	-.00120	-.00080	-.00020	.14850	.09400	1.57950
4.591	10.750	-.06000	.19520	-.00750	.07540	-.00110	-.00070	-.00020	.17930	.10210	1.75590
4.591	11.990	-.07000	.23140	-.00770	.07420	-.00070	-.00070	-.00020	.21270	.11240	1.89200
4.591	13.240	-.08000	.26860	-.00780	.07310	-.00020	-.00070	-.00020	.24660	.12440	1.98180
4.591	14.510	-.08000	.30820	-.00790	.07190	.00020	-.00060	-.00020	.28240	.13870	2.03570
4.591	15.790	-.09000	.34900	-.00750	.07090	.00080	-.00050	-.00020	.31880	.15510	2.05520
4.591	17.070	-.10000	.39210	-.00800	.06970	.00130	-.00040	-.00030	.35680	.17370	2.05350
4.591	18.360	-.11000	.43780	-.00860	.06880	.00190	-.00040	-.00030	.39640	.19530	2.02940
4.591	19.660	-.12000	.48330	-.00870	.06800	.00240	-.00030	-.00030	.43510	.21880	1.98840
4.591	20.970	-.12000	.53070	-.00940	.06720	.00310	-.00040	-.00030	.47440	.24490	1.93670
4.591	22.310	-.13000	.58160	-.01000	.06660	.00380	-.00050	-.00010	.51580	.27480	1.87720
4.591	23.650	-.14000	.63300	-.01110	.06600	.00450	-.00060	.00000	.55660	.30690	1.81340
4.591	24.980	-.15000	.68610	-.01280	.06530	.00520	-.00070	.00010	.59770	.34150	1.75010
4.591	26.330	-.16000	.74080	-.01490	.06450	.00610	-.00070	.00020	.63890	.37900	1.68550
4.591	27.650	-.16000	.79640	-.01720	.06370	.00670	-.00080	.00020	.67960	.41890	1.62240
4.591	29.000	-.17000	.85310	-.01950	.06300	.00750	-.00080	.00020	.71950	.46160	1.55860
4.591	30.320	-.18000	.90880	-.02210	.06260	.00780	-.00070	.00020	.75700	.50570	1.49690
4.591	31.450	-.18000	.95710	-.02390	.06230	.00800	-.00050	.00010	.78820	.54550	1.44480
4.591	32.270	-.19000	.99160	-.02560	.06230	.00820	-.00050	.00000	.80950	.57520	1.40740
4.591	32.640	-.19000	1.00630	-.02600	.06210	.00800	-.00050	.00000	.81820	.58820	1.39100
	GRADIENT	-.00452	.02171	.00075	-.00190	.00022	-.00005	-.00001	.02038	-.00116	.25357

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY015) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = .000 RWGRIT = .000
A-RATE = 1.000 A-SCHD = 1.000
PHI = .000

RUN NO. 71/ 0 RN/L = 15.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.680	.00000	-.07470	-.01330	.09280	-.00280	.00000	.00010	-.07370	.08590	-.85770
4.591	.750	.00000	-.04640	-.01170	.08950	-.00340	-.00010	.00010	-.04740	.08110	-.58540
4.591	1.830	-.01000	-.02430	-.01170	.08760	-.00230	-.00010	.00000	-.02690	.07900	-.34050
4.591	2.870	-.01000	-.00280	-.01080	.08560	-.00220	-.00010	.00000	-.00670	.07750	-.08690
4.591	3.930	-.02000	.02050	-.01020	.08390	-.00270	-.00050	.00010	.01520	.07720	.19760
4.591	4.980	-.02000	.04480	-.00950	.08210	-.00240	-.00050	.00010	.03820	.07790	.49100
4.591	6.040	-.03000	.06940	-.00890	.08040	-.00230	-.00060	.00010	.06140	.07930	.77350
4.591	7.110	-.04000	.09600	-.00810	.07880	-.00200	-.00050	.00010	.08650	.08210	1.05260
4.591	8.170	-.04000	.12330	-.00730	.07740	-.00190	-.00050	.00010	.11220	.08600	1.30360
4.591	9.230	-.05000	.15130	-.00680	.07630	-.00170	-.00050	.00010	.13840	.09140	1.51340
4.591	10.300	-.06000	.18000	-.00670	.07510	-.00180	-.00050	.00000	.16520	.09790	1.68660
4.591	11.360	-.06000	.20930	-.00680	.07400	-.00170	-.00040	.00000	.19230	.10560	1.81980
4.591	12.430	-.07000	.24000	-.00710	.07310	-.00130	-.00040	.00000	.22050	.11480	1.91970
4.591	13.520	-.08000	.27260	-.00680	.07230	-.00090	-.00040	.00000	.25010	.12580	1.98730
4.591	14.590	-.08000	.30620	-.00690	.07160	-.00050	-.00030	.00000	.28040	.13820	2.02870
4.591	15.670	-.09000	.34060	-.00700	.07080	-.00020	-.00020	.00000	.31110	.15190	2.04800
4.591	16.750	-.10000	.37670	-.00710	.06990	.00000	-.00010	.00000	.34300	.16720	2.05120
4.591	17.830	-.10000	.41390	-.00730	.06890	.00030	.00000	-.00010	.37550	.18400	2.04020
4.591	18.920	-.11000	.45140	-.00750	.06800	.00050	.00000	-.00010	.40780	.20240	2.01440
4.591	19.990	-.12000	.48880	-.00780	.06720	.00070	.00000	.00000	.43940	.22200	1.97850
4.591	21.070	-.12000	.52930	-.00830	.06660	.00080	.00000	.00000	.47300	.24430	1.93600
4.591	22.150	-.13000	.56910	-.00890	.06610	.00140	-.00010	.00000	.50540	.26760	1.88830
4.591	23.230	-.14000	.60960	-.00970	.06540	.00170	-.00030	.00000	.53780	.29250	1.83860
4.591	24.300	-.14000	.65230	-.01050	.06490	.00200	-.00030	.00010	.57130	.31970	1.78660
4.591	25.380	-.15000	.69430	-.01190	.06420	.00240	-.00050	.00020	.60340	.34780	1.73500
4.591	26.450	-.15000	.73820	-.01340	.06360	.00250	-.00050	.00020	.63640	.37810	1.68310
4.591	27.520	-.16000	.78290	-.01510	.06310	.00260	-.00040	.00010	.66910	.41010	1.63140
4.591	28.580	-.17000	.82760	-.01710	.06260	.00310	-.00040	.00010	.70090	.44340	1.58040
4.591	29.630	-.17000	.87240	-.01930	.06200	.00330	-.00040	.00020	.73170	.47790	1.53090
4.591	30.670	-.18000	.91720	-.02150	.06150	.00310	-.00020	.00010	.76170	.51360	1.48280
4.591	31.680	-.18000	.96080	-.02380	.06080	.00290	.00000	.00000	.79000	.54930	1.43800
4.591	32.530	-.19000	.99910	-.02560	.06060	.00290	.00000	.00000	.81420	.58140	1.40030
	GRADIENT	-.00408	.02106	.00063	-.00187	.00011	-.00009	-.00000	.01971	-.00141	.23946

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY016) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 70/ 0 RN/L = 14.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.710	.00000	-.07670	-.01260	.09330	-.00360	-.00020	.00030	-.07560	.08660	-.87240
4.591	-.100	.00000	-.06400	-.01170	.09140	-.00330	-.00020	.00020	-.06380	.08390	-.76100
4.591	.990	.00000	-.04210	-.01080	.08890	-.00290	-.00020	.00020	-.04350	.08050	-.54060
4.591	2.240	-.01000	-.01660	-.00980	.08670	-.00270	-.00020	.00020	-.01960	.07830	-.25120
4.591	3.500	-.01000	.00900	-.00890	.08490	-.00250	-.00030	.00010	.00420	.07770	.05490
4.591	4.730	-.02000	.03650	-.00860	.08290	-.00220	-.00040	.00020	.03020	.07790	.38740
4.591	5.950	-.03000	.06500	-.00740	.08070	-.00200	-.00040	.00010	.05700	.07930	.71890
4.591	7.210	-.04000	.09500	-.00660	.07860	-.00220	-.00040	.00020	.08540	.08220	1.03800
4.591	8.470	-.05000	.12720	-.00610	.07700	-.00190	-.00040	.00010	.11560	.08710	1.32680
4.591	9.730	-.05000	.16120	-.00570	.07550	-.00180	-.00040	.00010	.14740	.09390	1.57020
4.591	10.980	-.06000	.19490	-.00500	.07420	-.00180	-.00030	.00010	.17870	.10220	1.74800
4.591	12.250	-.07000	.23130	-.00470	.07310	-.00170	-.00020	.00000	.21220	.11270	1.88270
4.591	13.520	-.08000	.26900	-.00500	.07210	-.00130	-.00020	.00000	.24660	.12520	1.96970
4.591	14.790	-.09000	.30840	-.00530	.07120	-.00090	-.00020	.00000	.28210	.13970	2.01880
4.591	16.060	-.09000	.34970	-.00540	.07020	-.00050	-.00010	.00000	.31890	.15630	2.03950
4.591	17.340	-.10000	.39210	-.00550	.06910	-.00010	.00000	.00000	.35620	.17500	2.03470
4.591	18.620	-.11000	.43630	-.00580	.06810	.00010	.00000	.00000	.39440	.19600	2.01160
4.591	19.890	-.12000	.48160	-.00610	.06710	.00050	.00000	.00000	.43290	.21910	1.97530
4.591	21.180	-.12000	.52840	-.00650	.06640	.00090	.00000	.00000	.47170	.24500	1.92550
4.591	22.460	-.13000	.57580	-.00740	.06560	.00130	-.00020	.00010	.51020	.27280	1.86990
4.591	23.750	-.14000	.62570	-.00800	.06490	.00160	-.00030	.00020	.55000	.30370	1.81060
4.591	25.040	-.15000	.67670	-.00940	.06430	.00220	-.00040	.00020	.58940	.33700	1.74880
4.591	26.320	-.15000	.72810	-.01100	.06350	.00250	-.00040	.00020	.62810	.37230	1.68690
4.591	27.600	-.16000	.78130	-.01310	.06280	.00280	-.00030	.00020	.66710	.41030	1.62590
4.591	28.880	-.17000	.83450	-.01540	.06210	.00320	-.00030	.00020	.70470	.45020	1.56540
4.591	30.110	-.17000	.88740	-.01810	.06160	.00320	-.00030	.00020	.74080	.49140	1.50760
4.591	31.180	-.18000	.93390	-.02020	.06140	.00310	-.00010	.00010	.77140	.52910	1.45790
4.591	31.860	-.18000	.96500	-.02180	.06100	.00290	.00000	.00000	.79170	.55420	1.42840
4.591	32.140	-.19000	.97930	-.02290	.06080	.00290	.00000	.00000	.80110	.56660	1.41640
	GRADIENT	-.00364	.02066	.00074	-.00186	.00024	-.00003	-.00002	.01930	-.00158	.23129

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY017) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = .000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1070/ 0 RN/L = 16.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.910	.00000	-.07870	-.01260	.09310	-.00390	-.00020	.00020	-.07730	.08630	-.89610
4.591	-.210	.00000	-.06450	-.01210	.09150	-.00380	-.00020	.00020	-.06420	.08360	-.76730
4.591	.670	.00000	-.04680	-.01180	.08970	-.00380	-.00020	.00020	-.04780	.08090	-.59050
4.591	1.600	.00000	-.02760	-.01080	.08800	-.00380	-.00020	.00020	-.02980	.07900	-.37770
4.591	2.560	-.01000	-.00700	-.01010	.08620	-.00370	-.00030	.00010	-.01050	.07750	-.13540
4.591	3.530	-.01000	.01420	-.00940	.08450	-.00350	-.00040	.00010	.00940	.07680	.12340
4.591	4.500	-.02000	.03560	-.00860	.08280	-.00330	-.00040	.00010	.02970	.07690	.38600
4.591	5.490	-.03000	.05840	-.00810	.08110	-.00310	-.00060	.00010	.05120	.07780	.65820
4.591	6.500	-.03000	.08220	-.00770	.07950	-.00310	-.00060	.00010	.07360	.07970	.92370
4.591	7.500	-.04000	.10710	-.00700	.07820	-.00290	-.00060	.00010	.09710	.08290	1.17110
4.591	8.530	-.04000	.13390	-.00660	.07690	-.00260	-.00060	.00010	.12230	.08730	1.39940
4.591	9.560	-.05000	.16130	-.00640	.07580	-.00250	-.00050	.00010	.14790	.09290	1.59150
4.591	10.600	-.06000	.18990	-.00610	.07470	-.00250	-.00040	.00010	.17450	.09980	1.74700
4.591	11.650	-.06000	.21960	-.00580	.07380	-.00220	-.00040	.00000	.20190	.10810	1.86750
4.591	12.710	-.07000	.25080	-.00570	.07290	-.00200	-.00030	.00000	.23050	.11780	1.95620
4.591	13.790	-.08000	.28340	-.00590	.07210	-.00160	-.00030	.00000	.26010	.12910	2.01360
4.591	14.880	-.09000	.31750	-.00600	.07130	-.00130	-.00030	.00000	.29070	.14210	2.04600
4.591	15.960	-.09000	.35290	-.00660	.07030	-.00090	-.00020	.00000	.32220	.15640	2.05930
4.591	17.060	-.10000	.38950	-.00670	.06950	-.00060	-.00010	.00000	.35450	.17250	2.05430
4.591	18.170	-.11000	.42780	-.00670	.06850	-.00020	.00000	.00000	.38780	.19040	2.03610
4.591	19.290	-.11000	.46700	-.00720	.06750	.00000	.00000	.00000	.42130	.21000	2.00520
4.591	20.400	-.12000	.50740	-.00760	.06690	.00040	.00000	.00000	.45510	.23170	1.96420
4.591	21.540	-.13000	.54950	-.00800	.06620	.00070	-.00010	.00000	.48990	.25560	1.91630
4.591	22.670	-.13000	.59230	-.00880	.06550	.00120	-.00020	.00000	.52450	.28110	1.86550
4.591	23.820	-.14000	.63630	-.00960	.06500	.00180	-.00030	.00010	.55910	.30900	1.80920
4.591	24.980	-.15000	.68240	-.01080	.06430	.00220	-.00040	.00020	.59480	.33900	1.75420
4.591	26.150	-.15000	.73010	-.01280	.06360	.00250	-.00040	.00020	.63090	.37170	1.69710
4.591	27.320	-.16000	.77770	-.01490	.06300	.00270	-.00030	.00020	.66570	.40580	1.64060
4.591	28.460	-.17000	.82570	-.01670	.06240	.00320	-.00030	.00020	.70000	.44130	1.58620
4.591	29.660	-.17000	.87730	-.01950	.06170	.00360	-.00030	.00020	.73570	.48080	1.52990
4.591	31.040	-.18000	.93590	-.02220	.06120	.00330	-.00010	.00010	.77440	.52820	1.46610
4.591	32.040	-.18000	.97780	-.02400	.06090	.00300	.00000	.00000	.80080	.56360	1.42080
	GRADIENT	-.00357	.02111	.00075	-.00189	.00010	-.00004	-.00002	.01976	-.00174	.23827

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY018) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 69/ 0 RN/L = 15.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.730	.00000	-.07610	-.01350	.09290	-.00260	-.00050	.00010	-.07500	.08630	-.86900
4.591	.640	.00000	-.04930	-.01200	.08970	-.00380	-.00030	.00020	-.05030	.08140	-.61740
4.591	1.760	.00000	-.02520	-.01080	.08740	-.00300	-.00030	.00010	-.02760	.07890	-.35030
4.591	2.790	-.01000	-.00430	-.01030	.08580	-.00360	-.00020	.00010	-.00810	.07780	-.10410
4.591	3.840	-.02000	.01750	-.00950	.08420	-.00310	-.00020	.00010	.01240	.07740	.16040
4.591	4.900	-.02000	.04200	-.00850	.08210	-.00220	-.00040	.00010	.03540	.07760	.45720
4.591	5.960	-.03000	.06690	-.00790	.08010	-.00230	-.00050	.00020	.05900	.07880	.74870
4.591	7.020	-.04000	.09240	-.00740	.07860	-.00250	-.00040	.00010	.08310	.08140	1.02080
4.591	8.080	-.04000	.11880	-.00640	.07740	-.00240	-.00040	.00010	.10780	.08540	1.26220
4.591	9.160	-.05000	.14660	-.00570	.07630	-.00210	-.00050	.00010	.13380	.09060	1.47650
4.591	10.220	-.06000	.17530	-.00560	.07500	-.00210	-.00030	.00010	.16070	.09690	1.65730
4.591	11.300	-.06000	.20510	-.00560	.07410	-.00190	-.00040	.00000	.18820	.10470	1.79660
4.591	12.360	-.07000	.23570	-.00590	.07310	-.00170	-.00030	.00000	.21630	.11380	1.90110
4.591	13.430	-.08000	.26810	-.00590	.07230	-.00140	-.00030	.00000	.24590	.12440	1.97620
4.591	14.510	-.08000	.30110	-.00560	.07150	-.00110	-.00020	.00000	.27570	.13650	2.01940
4.591	15.590	-.09000	.33580	-.00530	.07070	-.00090	-.00010	.00000	.30670	.15000	2.04380
4.591	16.670	-.10000	.37050	-.00540	.06980	-.00050	.00000	.00000	.33730	.16490	2.04580
4.591	17.750	-.10000	.40810	-.00580	.06880	-.00030	.00000	.00000	.37030	.18180	2.03710
4.591	18.830	-.11000	.44480	-.00580	.06800	.00000	.00000	.00000	.40180	.19970	2.01220
4.591	19.910	-.12000	.48300	-.00600	.06720	.00020	.00000	.00000	.43420	.21950	1.97770
4.591	21.000	-.12000	.52210	-.00620	.06660	.00050	.00000	.00000	.46670	.24120	1.93490
4.591	22.070	-.13000	.56200	-.00650	.06600	.00090	.00000	.00000	.49920	.26430	1.88830
4.591	23.150	-.14000	.60250	-.00720	.06540	.00140	-.00020	.00010	.53160	.28900	1.83960
4.591	24.230	-.14000	.64400	-.00810	.06490	.00180	-.00030	.00010	.56420	.31560	1.78770
4.591	25.300	-.15000	.68620	-.00930	.06420	.00230	-.00040	.00020	.59660	.34350	1.73670
4.591	26.370	-.15000	.72960	-.01080	.06350	.00240	-.00040	.00020	.62920	.37340	1.68510
4.591	27.450	-.16000	.77390	-.01210	.06300	.00240	-.00030	.00020	.66160	.40500	1.63330
4.591	28.500	-.17000	.81850	-.01390	.06240	.00280	-.00030	.00020	.69350	.43800	1.58320
4.591	29.550	-.17000	.86230	-.01570	.06180	.00300	-.00030	.00020	.72380	.47180	1.53400
4.591	30.590	-.18000	.90670	-.01830	.06130	.00280	-.00020	.00010	.75340	.50710	1.48580
4.591	31.610	-.18000	.95090	-.02070	.06080	.00270	.00000	.00000	.78230	.54320	1.44000
4.591	32.480	-.19000	.99030	-.02250	.06050	.00280	.00000	-.00000	.80730	.57600	1.40150
	GRADIENT	-.00430	.02092	.00086	-.00187	.00008	.00003	-.00001	.01957	-.00149	.23675

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY019) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1069/ 0 RN/L = 16.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.910	.00000	-.07870	-.01330	.09280	-.00410	-.00020	.00010	-.07730	.08580	-.90150
4.591	-.380	.00000	-.06750	-.01320	.09160	-.00400	-.00020	.00010	-.06690	.08370	-.79940
4.591	.510	.00000	-.04940	-.01250	.08970	-.00400	-.00020	.00010	-.05010	.08090	-.61970
4.591	1.540	.00000	-.02780	-.01180	.08780	-.00390	-.00020	.00010	-.02990	.07860	-.38150
4.591	2.620	-.01000	-.00510	-.01070	.08580	-.00370	-.00030	.00010	-.00860	.07700	-.11240
4.591	3.720	-.01000	.01940	-.00990	.08380	-.00370	-.00040	.00010	.01440	.07640	.18940
4.591	4.860	-.02000	.04500	-.00900	.08180	-.00320	-.00050	.00010	.03860	.07680	.50360
4.591	6.040	-.03000	.07310	-.00840	.07980	-.00330	-.00060	.00010	.06510	.07850	.83000
4.591	7.250	-.04000	.10230	-.00760	.07820	-.00310	-.00060	.00010	.09270	.08190	1.13130
4.591	8.470	-.04000	.13370	-.00680	.07680	-.00290	-.00050	.00010	.12220	.08710	1.40310
4.591	9.700	-.05000	.16660	-.00640	.07550	-.00280	-.00040	.00000	.15290	.09390	1.62770
4.591	10.950	-.06000	.20090	-.00650	.07420	-.00260	-.00040	.00000	.18480	.10260	1.80180
4.591	12.190	-.07000	.23670	-.00670	.07320	-.00220	-.00040	.00000	.21770	.11310	1.92430
4.591	13.450	-.08000	.27440	-.00680	.07220	-.00190	-.00040	.00000	.25210	.12570	2.00470
4.591	14.730	-.08000	.31430	-.00660	.07120	-.00160	-.00020	.00000	.28800	.14050	2.04920
4.591	16.000	-.09000	.35560	-.00660	.07020	-.00110	-.00010	.00000	.32470	.15740	2.06310
4.591	17.290	-.10000	.39860	-.00670	.06910	-.00070	.00000	-.00010	.36250	.17640	2.05510
4.591	18.600	-.11000	.44420	-.00730	.06800	-.00030	.00000	-.00010	.40200	.19820	2.02780
4.591	19.900	-.12000	.49040	-.00730	.06710	.00000	.00000	.00000	.44110	.22220	1.98490
4.591	21.220	-.12000	.53880	-.00780	.06630	.00040	.00000	.00000	.48120	.24910	1.93130
4.591	22.570	-.13000	.58890	-.00850	.06560	.00100	-.00010	.00000	.52180	.27900	1.87010
4.591	23.910	-.14000	.64060	-.00990	.06480	.00150	-.00030	.00010	.56260	.31140	1.80650
4.591	25.260	-.15000	.69420	-.01120	.06400	.00200	-.00040	.00020	.60390	.34680	1.74140
4.591	26.630	-.15000	.74930	-.01330	.06330	.00250	-.00030	.00020	.64510	.38510	1.67500
4.591	27.970	-.16000	.80590	-.01500	.06260	.00270	-.00030	.00020	.68620	.42610	1.61040
4.591	29.330	-.17000	.86280	-.01730	.06190	.00310	-.00030	.00020	.72580	.46950	1.54580
4.591	30.620	-.18000	.91650	-.01980	.06160	.00300	-.00010	.00010	.76150	.51270	1.48500
4.591	31.680	-.18000	.95170	-.02160	.06110	.00290	.00000	.00000	.79060	.55020	1.43680
4.591	32.430	-.19000	.99220	-.02300	.06090	.00290	.00000	.00000	.80920	.57660	1.40340
4.591	32.710	-.19000	1.00260	-.02350	.06060	.00270	-.00010	.00000	.81520	.58600	1.39120
	GRADIENT	-.00336	.02136	.00078	-.00189	.00013	-.00005	.00000	.02001	-.00159	.24381

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY020) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 3.000 A-SCHD = 1.000
PHI = .000

RUN NO. 58/ 0 RN/L = 15.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.180	.00000	-.08690	.00450	.10480	-.00940	.00510	.00880	-.08730	.10590	-.82410
4.591	.680	-.01000	-.07700	.00400	.10330	-.00900	.00510	.00850	-.07830	.10370	-.75460
4.591	1.680	-.01000	-.05670	.00410	.10070	-.00800	.00470	.00800	-.05970	.09970	-.59850
4.591	2.920	-.02000	-.02920	.00470	.09740	-.00750	.00420	.00770	-.03410	.09490	-.35970
4.591	4.180	-.03000	.00000	.00540	.09450	-.00680	.00360	.00750	-.00670	.09160	-.07320
4.591	5.440	-.03000	.02930	.00550	.09170	-.00580	.00310	.00720	.02080	.09010	.23150
4.591	6.680	-.04000	.05940	.00550	.08910	-.00500	.00290	.00700	.04920	.09060	.54280
4.591	7.930	-.05000	.09100	.00620	.08680	-.00440	.00280	.00670	.07890	.09310	.84720
4.591	9.180	-.06000	.12410	.00720	.08490	-.00410	.00270	.00650	.10990	.09760	1.12590
4.591	10.430	-.07000	.15790	.00800	.08310	-.00380	.00260	.00660	.14140	.10400	1.35970
4.591	11.690	-.07000	.19320	.00820	.08150	-.00360	.00250	.00650	.17400	.11240	1.54800
4.591	12.950	-.08000	.22980	.00840	.08000	-.00310	.00240	.00650	.20760	.12270	1.69160
4.591	14.220	-.09000	.26850	.00850	.07860	-.00240	.00220	.00650	.24270	.13520	1.79500
4.591	15.490	-.10000	.30880	.00900	.07710	-.00170	.00200	.00650	.27890	.14970	1.86320
4.591	16.770	-.10000	.35040	.00930	.07570	-.00090	.00170	.00670	.31580	.16640	1.89770
4.591	18.050	-.11000	.39390	.00970	.07450	.00000	.00150	.00680	.35370	.18560	1.90550
4.591	19.330	-.12000	.43820	.00990	.07330	.00090	.00120	.00700	.39180	.20690	1.89370
4.591	20.610	-.13000	.48380	.01000	.07220	.00190	.00100	.00720	.43010	.23060	1.86530
4.591	21.900	-.13000	.53070	.01000	.07130	.00300	.00080	.00760	.46870	.25670	1.82550
4.591	23.190	-.14000	.57820	.01020	.07050	.00370	.00050	.00800	.50690	.28510	1.77760
4.591	24.470	-.15000	.62710	.01010	.06950	.00470	.00030	.00850	.54530	.31570	1.72700
4.591	25.760	-.15000	.67720	.00920	.06850	.00570	.00000	.00900	.58360	.34880	1.67320
4.591	27.050	-.16000	.72840	.00860	.06760	.00630	.00000	.00940	.62160	.38430	1.61750
4.591	28.330	-.17000	.78090	.00790	.06670	.00720	-.00010	.00970	.65960	.42220	1.56210
4.591	29.610	-.18000	.83330	.00710	.06590	.00780	-.00020	.01020	.69590	.46190	1.50630
4.591	30.800	-.18000	.88320	.00570	.06530	.00820	-.00020	.01060	.72930	.50140	1.45450
4.591	31.680	-.19000	.92110	.00480	.06480	.00840	-.00020	.01100	.75400	.53200	1.41730
4.591	32.140	-.19000	.94200	.00390	.06440	.00850	-.00020	.01110	.76770	.54880	1.39880
	GRADIENT	-.00675	.02172	.00027	-.00258	.00064	-.00039	-.00032	.02015	-.00362	.18723

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY021) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1058/ 0 RN/L = 16.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.960	.00000	-.11100	.00430	.10750	-.00890	.00550	.00920	-.10920	.10380	-1.05210
4.591	-.400	.00000	-.09860	.00410	.10570	-.00870	.00520	.00890	-.09790	.09980	-.98100
4.591	.460	-.01000	-.07940	.00370	.10320	-.00840	.00500	.00850	-.08020	.09450	-.84780
4.591	1.380	-.01000	-.05960	.00360	.10080	-.00780	.00470	.00810	-.06180	.09110	-.67910
4.591	2.330	-.02000	-.03840	.00380	.09840	-.00710	.00430	.00770	-.04200	.08830	-.47570
4.591	3.290	-.02000	-.01660	.00410	.09600	-.00680	.00400	.00750	-.02160	.08640	-.25070
4.591	4.270	-.03000	.00680	.00440	.09360	-.00610	.00360	.00730	.00040	.08530	.00540
4.591	5.250	-.03000	.02890	.00510	.09140	-.00550	.00320	.00710	.02120	.08510	.24960
4.591	6.240	-.04000	.05330	.00530	.08930	-.00500	.00290	.00700	.04420	.08590	.51450
4.591	7.250	-.05000	.07830	.00570	.08750	-.00480	.00270	.00690	.06770	.08800	.76900
4.591	8.270	-.05000	.10420	.00630	.08610	-.00440	.00260	.00680	.09200	.09150	1.00550
4.591	9.300	-.06000	.13200	.00670	.08460	-.00420	.00260	.00670	.11800	.09610	1.22770
4.591	10.340	-.06000	.16050	.00700	.08320	-.00410	.00260	.00660	.14460	.10200	1.41720
4.591	11.380	-.07000	.18990	.00730	.08190	-.00400	.00250	.00650	.17170	.10910	1.57340
4.591	12.430	-.08000	.21970	.00750	.08070	-.00350	.00240	.00650	.19910	.11750	1.69340
4.591	13.510	-.08000	.25190	.00760	.07940	-.00290	.00220	.00660	.22840	.12760	1.78930
4.591	14.580	-.09000	.28550	.00770	.07820	-.00230	.00190	.00660	.25880	.13920	1.85940
4.591	15.670	-.10000	.32080	.00800	.07670	-.00160	.00180	.00660	.29050	.15230	1.90760
4.591	16.760	-.10000	.35660	.00830	.07540	-.00080	.00160	.00670	.32210	.16680	1.93040
4.591	17.870	-.11000	.39420	.00850	.07430	.00000	.00150	.00680	.35500	.18360	1.93290
4.591	18.980	-.12000	.43290	.00870	.07310	.00110	.00130	.00690	.38830	.20190	1.92300
4.591	20.100	-.12000	.47280	.00870	.07220	.00190	.00110	.00720	.42210	.22230	1.89890
4.591	21.220	-.13000	.51250	.00880	.07140	.00260	.00090	.00750	.45500	.24420	1.86280
4.591	22.360	-.14000	.55400	.00880	.07070	.00330	.00070	.00780	.48870	.26840	1.82040
4.591	23.510	-.14000	.59720	.00880	.07000	.00410	.00040	.00830	.52300	.29470	1.77440
4.591	24.660	-.15000	.64150	.00840	.06900	.00520	.00010	.00870	.55770	.32280	1.72760
4.591	25.820	-.15000	.68720	.00770	.06810	.00610	.00000	.00910	.59250	.35320	1.67740
4.591	26.990	-.16000	.73450	.00690	.06740	.00660	.00000	.00940	.62760	.38610	1.62540
4.591	28.150	-.17000	.78100	.00630	.06670	.00730	-.00010	.00980	.66100	.42010	1.57330
4.591	29.300	-.17000	.82850	.00520	.06590	.00810	-.00020	.01020	.69430	.45580	1.52290
4.591	30.640	-.18000	.88380	.00410	.06510	.00850	-.00010	.01070	.73140	.49940	1.46440
4.591	31.880	-.19000	.93430	.00300	.06440	.00900	-.00020	.01110	.76360	.54130	1.41050
4.591	32.270	-.19000	.94970	.00240	.06400	.00860	-.00020	.01120	.77320	.55430	1.39470
	GRADIENT	-.00563	.02240	.00002	-.00264	.00054	-.00035	-.00037	.02085	-.00349	.20192

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY022) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 57/ 0 RN/L = 15.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.350	-.01000	-.08060	.00380	.10380	-.00710	.00530	.00830	-.08130	.09830	-.82640
4.591	1.630	-.02000	-.05410	.00370	.10020	-.00730	.00490	.00810	-.05680	.09380	-.60590
4.591	2.820	-.02000	-.02850	.00430	.09740	-.00620	.00450	.00770	-.03300	.09040	-.36510
4.591	3.850	-.03000	-.00570	.00420	.09530	-.00570	.00430	.00730	-.01170	.08870	-.13280
4.591	4.920	-.03000	.01970	.00500	.09230	-.00550	.00360	.00720	.01220	.08730	.14020
4.591	5.990	-.04000	.04510	.00520	.09000	-.00530	.00310	.00710	.03610	.08770	.41240
4.591	7.060	-.05000	.07150	.00530	.08810	-.00470	.00320	.00690	.06100	.08960	.68110
4.591	8.140	-.05000	.09860	.00580	.08650	-.00430	.00290	.00680	.08630	.09270	.93050
4.591	9.210	-.06000	.12690	.00630	.08500	-.00430	.00280	.00670	.11280	.09720	1.16020
4.591	10.290	-.06000	.15590	.00690	.08340	-.00410	.00270	.00660	.13980	.10290	1.35830
4.591	11.370	-.07000	.18600	.00730	.08200	-.00400	.00280	.00660	.16760	.10990	1.52460
4.591	12.450	-.08000	.21770	.00760	.08080	-.00360	.00260	.00660	.19670	.11850	1.65770
4.591	13.540	-.08000	.24940	.00770	.07950	-.00290	.00240	.00670	.22560	.12830	1.75720
4.591	14.630	-.09000	.28360	.00790	.07820	-.00230	.00220	.00670	.25660	.14000	1.83230
4.591	15.720	-.10000	.31800	.00840	.07670	-.00160	.00200	.00680	.28740	.15270	1.88190
4.591	16.810	-.10000	.35370	.00870	.07550	-.00090	.00180	.00680	.31890	.16710	1.90790
4.591	17.900	-.11000	.38970	.00940	.07430	.00000	.00160	.00700	.35030	.18320	1.91250
4.591	19.000	-.12000	.42830	.00980	.07320	.00100	.00150	.00710	.38340	.20120	1.90490
4.591	20.080	-.12000	.46650	.00960	.07230	.00160	.00130	.00730	.41590	.22080	1.88380
4.591	21.170	-.13000	.50540	.01000	.07150	.00230	.00110	.00760	.44830	.24190	1.85250
4.591	22.270	-.14000	.54520	.01000	.07090	.00290	.00090	.00790	.48060	.26500	1.81380
4.591	23.360	-.14000	.58610	.01010	.07030	.00360	.00060	.00830	.51330	.28970	1.77160
4.591	24.440	-.15000	.62810	.00980	.06940	.00430	.00030	.00870	.54460	.31510	1.72820
4.591	25.530	-.15000	.66890	.00950	.06840	.00520	.00010	.00910	.57740	.34290	1.68370
4.591	26.610	-.16000	.71120	.00890	.06760	.00550	.00000	.00940	.60910	.37200	1.63710
4.591	27.690	-.16000	.75500	.00840	.06700	.00610	.00000	.00970	.64090	.40330	1.58900
4.591	28.760	-.17000	.79820	.00780	.06620	.00660	.00000	.01010	.67160	.43530	1.54260
4.591	29.820	-.18000	.84210	.00690	.06540	.00730	-.00010	.01050	.70180	.46890	1.49680
4.591	30.880	-.18000	.88540	.00560	.06470	.00750	-.00010	.01090	.73060	.50330	1.45150
4.591	31.890	-.19000	.92800	.00430	.06400	.00790	-.00020	.01130	.75820	.53810	1.40890
4.591	32.630	-.19000	.95990	.00350	.06370	.00830	-.00020	.01150	.77820	.56470	1.37790
	GRADIENT	-.00441	.02190	.00025	-.00246	.00042	-.00035	-.00026	.02041	-.00241	.21112

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY023) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 5.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1057/ 0 RN/L = 16.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-1.500	.00000	-.12010	.00380	.10900	-.00970	.00580	.00950	-.11740	.10480	-1.12040
4.591	-.680	.00000	-.10250	.00350	.10630	-.00920	.00550	.00900	-.10130	.10000	-1.01250
4.591	.370	-.01000	-.07860	.00300	.10320	-.00860	.00510	.00850	-.07920	.09500	-.83410
4.591	1.450	-.01000	-.05560	.00320	.10040	-.00800	.00480	.00810	-.05790	.09110	-.63530
4.591	2.530	-.02000	-.03160	.00350	.09750	-.00740	.00430	.00770	-.03550	.08820	-.40320
4.591	3.650	-.03000	-.00610	.00400	.09490	-.00670	.00390	.00750	-.01160	.08640	-.13510
4.591	4.790	-.03000	.02030	.00430	.09220	-.00610	.00350	.00720	.01310	.08570	.15370
4.591	5.980	-.04000	.04880	.00470	.08960	-.00560	.00310	.00700	.04000	.08630	.46410
4.591	7.210	-.05000	.07900	.00500	.08740	-.00510	.00280	.00690	.06840	.08870	.77070
4.591	8.420	-.05000	.11040	.00580	.08550	-.00470	.00270	.00680	.09790	.09290	1.05380
4.591	9.650	-.06000	.14350	.00610	.08390	-.00440	.00260	.00670	.12880	.09900	1.30110
4.591	10.890	-.07000	.17810	.00640	.08230	-.00430	.00260	.00660	.16080	.10670	1.50710
4.591	12.140	-.08000	.21350	.00700	.08080	-.00390	.00250	.00660	.19340	.11620	1.66390
4.591	13.410	-.08000	.25100	.00710	.07930	-.00320	.00230	.00660	.22760	.12770	1.78160
4.591	14.690	-.09000	.29080	.00730	.07780	-.00250	.00210	.00670	.26360	.14140	1.86390
4.591	15.960	-.10000	.33170	.00760	.07620	-.00160	.00190	.00680	.30010	.15700	1.91110
4.591	17.250	-.11000	.37510	.00800	.07480	-.00060	.00170	.00690	.33830	.17520	1.93100
4.591	18.550	-.11000	.41940	.00840	.07350	.00030	.00150	.00700	.37670	.19580	1.92370
4.591	19.840	-.12000	.46490	.00840	.07240	.00120	.00130	.00730	.41530	.21860	1.89940
4.591	21.160	-.13000	.51240	.00870	.07140	.00200	.00100	.00760	.45480	.24430	1.86160
4.591	22.510	-.14000	.56160	.00870	.07050	.00290	.00070	.00800	.49470	.27300	1.81190
4.591	23.850	-.14000	.61220	.00860	.06960	.00380	.00040	.00850	.53490	.30420	1.75820
4.591	25.200	-.15000	.66420	.00790	.06850	.00490	.00010	.00900	.57500	.33780	1.70190
4.591	26.570	-.16000	.71810	.00710	.06750	.00580	.00000	.00950	.61550	.37480	1.64220
4.591	27.920	-.17000	.77250	.00650	.06660	.00650	.00000	.00990	.65500	.41390	1.58240
4.591	29.290	-.17000	.82860	.00590	.06580	.00730	.00000	.01040	.69420	.45610	1.52180
4.591	30.570	-.18000	.88060	.00490	.06510	.00780	-.00010	.01090	.72880	.49750	1.46470
4.591	31.620	-.19000	.92320	.00400	.06450	.00820	-.00010	.01130	.75630	.53250	1.42010
4.591	32.300	-.19000	.95000	.00320	.06420	.00860	-.00010	.01150	.77270	.55550	1.39090
4.591	32.690	-.19000	.96470	.00300	.06360	.00830	-.00020	.01160	.78160	.56820	1.37550
	GRADIENT	-.00540	.02227	.00011	-.00265	.00057	-.00037	-.00036	.02071	-.00304	.20310

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY024) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 44/ 0 RN/L = 15.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.450	-.01000	-.08070	.00370	.10410	-.00720	.00500	.00870	-.08150	.09620	-.84730
4.591	1.730	-.02000	-.05260	.00470	.10020	-.00630	.00460	.00820	-.05540	.09130	-.60770
4.591	2.710	-.02000	-.03080	.00430	.09790	-.00630	.00430	.00780	-.03510	.08900	-.39480
4.591	3.620	-.03000	-.01010	.00450	.09540	-.00600	.00390	.00750	-.01560	.08710	-.17940
4.591	4.560	-.03000	.01200	.00490	.09300	-.00500	.00340	.00730	.00520	.08610	.06050
4.591	5.490	-.04000	.03420	.00510	.09080	-.00440	.00310	.00710	.02610	.08600	.30350
4.591	6.420	-.04000	.05640	.00510	.08900	-.00420	.00290	.00690	.04690	.08700	.53930
4.591	7.360	-.05000	.07980	.00560	.08740	-.00390	.00280	.00680	.06900	.08910	.77390
4.591	8.300	-.05000	.10390	.00640	.08580	-.00340	.00260	.00670	.09150	.09210	.99410
4.591	9.240	-.06000	.12850	.00640	.08460	-.00330	.00250	.00670	.11460	.09620	1.19130
4.591	10.180	-.06000	.15390	.00690	.08320	-.00330	.00250	.00660	.13810	.10110	1.36610
4.591	11.120	-.07000	.18010	.00740	.08190	-.00310	.00240	.00660	.16250	.10710	1.51670
4.591	12.060	-.08000	.20720	.00750	.08090	-.00290	.00230	.00650	.18740	.11430	1.64000
4.591	13.010	-.08000	.23500	.00760	.07970	-.00240	.00210	.00660	.21290	.12240	1.73860
4.591	13.960	-.09000	.26360	.00800	.07860	-.00170	.00200	.00660	.23880	.13170	1.81310
4.591	14.920	-.09000	.29360	.00820	.07750	-.00110	.00180	.00660	.26590	.14230	1.86850
4.591	15.870	-.10000	.32370	.00860	.07630	-.00050	.00180	.00670	.29280	.15370	1.90460
4.591	16.820	-.10000	.35500	.00890	.07520	.00000	.00160	.00680	.32050	.16650	1.92420
4.591	17.770	-.11000	.38640	.00930	.07410	.00080	.00150	.00690	.34790	.18030	1.92900
4.591	18.720	-.12000	.41910	.00940	.07320	.00160	.00130	.00700	.37620	.19570	1.92190
4.591	19.680	-.12000	.45300	.00950	.07240	.00230	.00120	.00720	.40500	.21260	1.90480
4.591	20.620	-.13000	.48700	.00940	.07150	.00310	.00100	.00740	.43360	.23040	1.88190
4.591	21.570	-.13000	.52100	.00940	.07090	.00370	.00080	.00760	.46160	.24940	1.85050
4.591	22.520	-.14000	.55630	.00930	.07030	.00440	.00050	.00790	.49020	.27010	1.81510
4.591	23.470	-.14000	.59130	.00960	.06960	.00530	.00020	.00830	.51810	.29140	1.77780
4.591	24.420	-.15000	.62660	.00960	.06890	.00600	.00000	.00870	.54560	.31400	1.73760
4.591	25.370	-.15000	.66320	.00950	.06830	.00700	-.00020	.00910	.57370	.33810	1.69680
4.591	26.300	-.16000	.70030	.00900	.06760	.00750	-.00030	.00930	.60160	.36330	1.65610
4.591	27.240	-.16000	.73750	.00850	.06710	.00790	-.00040	.00960	.62890	.38970	1.61370
4.591	28.170	-.17000	.77530	.00810	.06650	.00850	-.00040	.00990	.65600	.41720	1.57240
4.591	29.100	-.17000	.81360	.00740	.06590	.00910	-.00050	.01030	.68300	.44590	1.53150
4.591	30.020	-.18000	.85110	.00650	.06520	.00970	-.00060	.01060	.70850	.47490	1.49180
4.591	30.930	-.18000	.88910	.00530	.06470	.00990	-.00060	.01090	.73370	.50530	1.45200
4.591	31.790	-.19000	.92600	.00410	.06420	.01010	-.00060	.01120	.75770	.53530	1.41530
4.591	32.530	-.19000	.95740	.00330	.06390	.01050	-.00060	.01150	.77730	.56170	1.38380
	GRADIENT	-.00498	.02252	.00023	-.00268	.00047	-.00038	-.00035	.02107	-.00245	.22099

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY025) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 45/ 0 RN/L = 17.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.370	-.01000	-.07870	.00480	.10280	-.00580	.00500	.00860	-.07930	.09520	-.83380
4.591	1.720	-.01000	-.04940	.00490	.09880	-.00750	.00460	.00780	-.05210	.09010	-.57870
4.591	2.980	-.02000	-.02090	.00490	.09490	-.00690	.00420	.00740	-.02550	.08640	-.29510
4.591	4.100	-.03000	.00420	.00500	.09230	-.00440	.00350	.00720	-.00180	.08500	-.02120
4.591	5.240	-.04000	.03090	.00510	.08960	-.00390	.00330	.00690	.02320	.08460	.27490
4.591	6.390	-.04000	.05850	.00500	.08790	-.00420	.00320	.00670	.04910	.08630	.56950
4.591	7.540	-.05000	.08640	.00570	.08620	-.00510	.00270	.00650	.07540	.08920	.84490
4.591	8.690	-.06000	.11590	.00660	.08480	-.00350	.00300	.00640	.10290	.09370	1.09900
4.591	9.840	-.06000	.14660	.00680	.08300	-.00400	.00270	.00630	.13160	.09910	1.32790
4.591	11.010	-.07000	.17830	.00720	.08120	-.00420	.00250	.00620	.16100	.10590	1.52000
4.591	12.160	-.08000	.21140	.00700	.07970	-.00350	.00240	.00620	.19150	.11460	1.67160
4.591	13.330	-.08000	.24570	.00730	.07850	-.00250	.00230	.00620	.22290	.12510	1.78120
4.591	14.500	-.09000	.28110	.00710	.07690	-.00190	.00200	.00630	.25500	.13690	1.86230
4.591	15.660	-.10000	.31810	.00700	.07550	-.00130	.00170	.00630	.28810	.15060	1.91230
4.591	16.830	-.10000	.35530	.00710	.07410	-.00070	.00140	.00640	.32110	.16590	1.93540
4.591	18.010	-.11000	.39560	.00740	.07310	.00010	.00120	.00660	.35620	.18390	1.93710
4.591	19.180	-.12000	.43550	.00770	.07190	.00110	.00100	.00680	.39050	.20310	1.92270
4.591	20.350	-.12000	.47630	.00770	.07080	.00220	.00090	.00700	.42490	.22420	1.89510
4.591	21.520	-.13000	.51830	.00830	.07000	.00300	.00060	.00730	.45960	.24740	1.85730
4.591	22.690	-.14000	.56110	.00810	.06920	.00390	.00040	.00760	.49420	.27250	1.81320
4.591	23.860	-.14000	.60460	.00800	.06830	.00500	.00010	.00810	.52870	.29940	1.76580
4.591	25.040	-.15000	.64930	.00730	.06750	.00600	-.00010	.00860	.56330	.32830	1.71530
4.591	26.200	-.16000	.69430	.00690	.06670	.00690	-.00030	.00900	.59720	.35890	1.66360
4.591	27.360	-.16000	.74110	.00640	.06610	.00760	-.00030	.00940	.63160	.39190	1.61150
4.591	28.520	-.17000	.78770	.00600	.06540	.00850	-.00040	.00970	.66480	.42630	1.55950
4.591	29.670	-.18000	.83450	.00480	.06450	.00940	-.00050	.01020	.69720	.46190	1.50940
4.591	30.790	-.18000	.88110	.00340	.06380	.00980	-.00050	.01060	.72850	.49880	1.46050
4.591	31.890	-.19000	.92710	.00220	.06310	.01030	-.00050	.01100	.75830	.53630	1.41380
4.591	32.630	-.19000	.95940	.00120	.06280	.01060	-.00050	.01120	.77860	.56320	1.38220
	GRADIENT	-.00554	.02226	.00005	-.00285	.00035	-.00039	-.00037	.02080	-.00278	.21808

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY026) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1045/ 0 RN/L = 18.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-1.510	.00000	-.11920	.00610	.10850	-.00950	.00590	.00960	-.11650	.10370	-1.12330
4.591	-.580	.00000	-.09830	.00550	.10530	-.00880	.00530	.00910	-.09730	.09820	-.99060
4.591	.410	-.01000	-.07650	.00490	.10230	-.00840	.00510	.00850	-.07720	.09350	-.82540
4.591	1.440	-.01000	-.05390	.00480	.09960	-.00760	.00480	.00800	-.05620	.08990	-.62480
4.591	2.490	-.02000	-.03070	.00470	.09670	-.00700	.00440	.00760	-.03460	.08700	-.39790
4.591	3.560	-.02000	-.00690	.00470	.09400	-.00660	.00390	.00730	-.01220	.08490	-.14390
4.591	4.620	-.03000	.01780	.00470	.09120	-.00580	.00350	.00700	.01110	.08380	.13300
4.591	5.710	-.04000	.04340	.00470	.08870	-.00520	.00310	.00680	.03520	.08400	.41980
4.591	6.810	-.04000	.07060	.00480	.08660	-.00500	.00300	.00660	.06080	.08580	.70940
4.591	7.910	-.05000	.09780	.00520	.08490	-.00440	.00280	.00640	.08630	.08890	.97080
4.591	9.030	-.06000	.12690	.00560	.08330	-.00430	.00280	.00630	.11360	.09360	1.21360
4.591	10.160	-.06000	.15760	.00570	.08180	-.00410	.00270	.00620	.14220	.09970	1.42620
4.591	11.300	-.07000	.18940	.00560	.08030	-.00400	.00250	.00620	.17170	.10720	1.60050
4.591	12.450	-.08000	.22230	.00590	.07890	-.00360	.00230	.00620	.20190	.11650	1.73320
4.591	13.620	-.08000	.25660	.00590	.07760	-.00280	.00200	.00620	.23320	.12740	1.82980
4.591	14.800	-.09000	.29330	.00530	.07640	-.00200	.00180	.00630	.26620	.14040	1.89590
4.591	15.970	-.10000	.33020	.00550	.07500	-.00130	.00150	.00630	.29920	.15470	1.93330
4.591	17.170	-.10000	.37000	.00570	.07370	-.00050	.00130	.00650	.33430	.17150	1.94900
4.591	18.380	-.11000	.41130	.00600	.07250	.00040	.00100	.00660	.37010	.19040	1.94350
4.591	19.590	-.12000	.45290	.00610	.07140	.00140	.00090	.00680	.40560	.21120	1.92040
4.591	20.810	-.13000	.49650	.00630	.07040	.00220	.00070	.00710	.44210	.23430	1.88640
4.591	22.040	-.13000	.54070	.00660	.06960	.00300	.00050	.00750	.47820	.25960	1.84170
4.591	23.290	-.14000	.58760	.00640	.06860	.00430	.00010	.00790	.51590	.28760	1.79340
4.591	24.530	-.15000	.63450	.00600	.06770	.00540	-.00010	.00840	.55260	.31750	1.74040
4.591	25.800	-.15000	.68380	.00550	.06690	.00670	-.00020	.00890	.59010	.35040	1.68410
4.591	27.090	-.16000	.73490	.00500	.06620	.00740	-.00030	.00930	.62790	.38620	1.62590
4.591	28.330	-.17000	.78540	.00430	.06550	.00860	-.00040	.00980	.66420	.42300	1.57010
4.591	29.570	-.18000	.83600	.00320	.06440	.00950	-.00050	.01020	.69940	.46150	1.51550
4.591	31.140	-.18000	.90140	.00170	.06360	.01020	-.00040	.01080	.74280	.51360	1.44620
4.591	32.360	-.19000	.95110	.00050	.06310	.01070	-.00040	.01120	.77400	.55540	1.39340
4.591	32.610	-.19000	.96140	.00040	.06250	.01060	-.00040	.01130	.78050	.56380	1.38420
	GRADIENT	-.00488	.02225	-.00021	-.00278	.00059	-.00037	-.00043	.02072	-.00321	.20530

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY027) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 46/ 0 RN/L = 17.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.160	-.01000	-.08460	.00360	.10450	-.00900	.00510	.00870	-.08490	.09700	-.87490
4.591	.650	-.01000	-.07470	.00290	.10320	-.00880	.00500	.00840	-.07580	.09510	-.79720
4.591	1.670	-.01000	-.05370	.00330	.10050	-.00820	.00460	.00800	-.05640	.09160	-.61560
4.591	2.910	-.02000	-.02660	.00410	.09700	-.00730	.00420	.00750	-.03110	.08820	-.35270
4.591	4.180	-.03000	.00290	.00490	.09350	-.00640	.00360	.00720	-.00330	.08610	-.03870
4.591	5.440	-.04000	.03320	.00530	.09030	-.00520	.00330	.00690	.02520	.08560	.29420
4.591	6.690	-.04000	.06340	.00550	.08760	-.00390	.00320	.00670	.05370	.08690	.61770
4.591	7.930	-.05000	.09480	.00630	.08530	-.00330	.00290	.00660	.08310	.09000	.92340
4.591	9.180	-.06000	.12760	.00680	.08350	-.00300	.00280	.00650	.11390	.09520	1.19550
4.591	10.440	-.07000	.16180	.00710	.08170	-.00310	.00270	.00640	.14570	.10210	1.42610
4.591	11.700	-.07000	.19710	.00700	.08020	-.00310	.00260	.00630	.17830	.11090	1.60750
4.591	12.950	-.08000	.23350	.00690	.07870	-.00230	.00230	.00630	.21170	.12140	1.74340
4.591	14.220	-.09000	.27220	.00740	.07740	-.00180	.00210	.00630	.24680	.13420	1.83870
4.591	15.500	-.10000	.31240	.00750	.07590	-.00120	.00180	.00640	.28280	.14890	1.89890
4.591	16.770	-.10000	.35430	.00800	.07450	-.00030	.00160	.00650	.32000	.16590	1.92900
4.591	18.050	-.11000	.39680	.00840	.07330	.00030	.00130	.00660	.35710	.18490	1.93070
4.591	19.330	-.12000	.44140	.00880	.07210	.00140	.00110	.00680	.39530	.20650	1.91420
4.591	20.610	-.13000	.48670	.00880	.07110	.00240	.00080	.00710	.43340	.23020	1.88200
4.591	21.910	-.13000	.53290	.00940	.07010	.00320	.00050	.00740	.47130	.25640	1.83830
4.591	23.200	-.14000	.58140	.00950	.06930	.00420	.00010	.00790	.51030	.28520	1.78870
4.591	24.480	-.15000	.63000	.00920	.06830	.00540	-.00010	.00830	.54850	.31570	1.73700
4.591	25.770	-.15000	.68020	.00870	.06730	.00670	-.00030	.00880	.58680	.34900	1.68130
4.591	27.060	-.16000	.73120	.00800	.06650	.00770	-.00040	.00920	.62470	.38460	1.62420
4.591	28.340	-.17000	.78340	.00740	.06570	.00880	-.00050	.00970	.66220	.42250	1.56730
4.591	29.610	-.18000	.83550	.00660	.06480	.00950	-.00050	.01010	.69830	.46210	1.51110
4.591	30.810	-.18000	.88440	.00540	.06430	.00990	-.00050	.01050	.73090	.50120	1.45810
4.591	31.670	-.19000	.92130	.00430	.06400	.01010	-.00050	.01080	.75480	.53120	1.42080
4.591	32.110	-.19000	.94140	.00360	.06360	.01030	-.00050	.01100	.76800	.54730	1.40300
	GRADIENT	-.00509	.02173	.00041	-.00274	.00066	-.00037	-.00037	.02026	-.00274	.20749

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY028) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1046/ 0 RN/L = 17.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.230	-.01000	-.08080	.00430	.10270	-.00840	.00520	.00860	-.08120	.09430	-.86050
4.591	1.160	-.01000	-.06090	.00420	.10020	-.00790	.00490	.00810	-.06280	.09080	-.69150
4.591	2.120	-.02000	-.04010	.00450	.09770	-.00730	.00450	.00770	-.04340	.08790	-.49390
4.591	3.100	-.02000	-.01800	.00470	.09520	-.00660	.00410	.00740	-.02270	.08580	-.26440
4.591	4.070	-.03000	.00460	.00500	.09260	-.00600	.00370	.00720	-.00130	.08430	-.01560
4.591	5.050	-.03000	.02750	.00500	.09020	-.00530	.00340	.00690	.02020	.08390	.24140
4.591	6.060	-.04000	.05160	.00520	.08820	-.00500	.00310	.00670	.04290	.08470	.50700
4.591	7.080	-.05000	.07660	.00580	.08640	-.00470	.00300	.00660	.06640	.08670	.76670
4.591	8.100	-.05000	.10310	.00620	.08490	-.00430	.00290	.00650	.09130	.09010	1.01280
4.591	9.130	-.06000	.12980	.00660	.08340	-.00420	.00280	.00640	.11630	.09450	1.23060
4.591	10.180	-.06000	.15890	.00650	.08190	-.00410	.00270	.00630	.14350	.10020	1.43200
4.591	11.220	-.07000	.18780	.00650	.08050	-.00400	.00250	.00620	.17020	.10700	1.58970
4.591	12.280	-.08000	.21820	.00630	.07930	-.00350	.00230	.00620	.19820	.11540	1.71630
4.591	13.350	-.08000	.25000	.00640	.07810	-.00290	.00210	.00620	.22720	.12530	1.81260
4.591	14.430	-.09000	.28280	.00650	.07680	-.00220	.00180	.00630	.25690	.13660	1.87990
4.591	15.520	-.10000	.31710	.00670	.07560	-.00160	.00170	.00630	.28760	.14940	1.92460
4.591	16.620	-.10000	.35320	.00710	.07420	-.00080	.00150	.00640	.31960	.16400	1.94850
4.591	17.720	-.11000	.39020	.00720	.07310	.00000	.00120	.00660	.35200	.18030	1.95150
4.591	18.830	-.11000	.42850	.00760	.07220	.00070	.00100	.00680	.38490	.19870	1.93680
4.591	19.950	-.12000	.46800	.00770	.07130	.00180	.00080	.00690	.41840	.21880	1.91160
4.591	21.080	-.13000	.50780	.00760	.07030	.00260	.00060	.00720	.45150	.24050	1.87700
4.591	22.220	-.13000	.55040	.00750	.06970	.00350	.00040	.00750	.48620	.26500	1.83450
4.591	23.360	-.14000	.59270	.00790	.06880	.00460	.00010	.00800	.52000	.29060	1.78940
4.591	24.520	-.15000	.63680	.00760	.06810	.00580	-.00010	.00850	.55450	.31870	1.73960
4.591	25.680	-.15000	.68250	.00700	.06730	.00700	-.00030	.00890	.58950	.34900	1.68900
4.591	26.860	-.16000	.72960	.00650	.06660	.00760	-.00030	.00930	.62440	.38180	1.63550
4.591	28.030	-.17000	.77660	.00610	.06590	.00870	-.00040	.00960	.65840	.41590	1.58300
4.591	29.170	-.17000	.82390	.00500	.06500	.00960	-.00050	.01010	.69160	.45120	1.53280
4.591	30.480	-.18000	.87820	.00390	.06420	.00990	-.00040	.01050	.72830	.49380	1.47470
4.591	31.770	-.19000	.93050	.00280	.06360	.01030	-.00050	.01100	.76180	.53720	1.41820
4.591	32.230	-.19000	.94860	.00220	.06330	.01030	-.00050	.01100	.77300	.55260	1.39870
	GRADIENT	-.00520	.02222	.00020	-.00262	.00063	-.00040	-.00036	.02078	-.00259	.22018

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY029) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 47/ 0 RN/L = 17.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.420	-.01000	-.07820	.00460	.10260	-.00770	.00500	.00840	-.07890	.09490	-.83090
4.591	1.810	-.02000	-.04830	.00450	.09900	-.00800	.00470	.00780	-.05120	.09030	-.56740
4.591	2.930	-.02000	-.02310	.00440	.09610	-.00630	.00430	.00750	-.02760	.08750	-.31590
4.591	3.970	-.03000	.00050	.00440	.09260	-.00600	.00380	.00710	-.00530	.08510	-.06260
4.591	5.020	-.03000	.02530	.00460	.08980	-.00520	.00340	.00690	.01790	.08420	.21350
4.591	6.080	-.04000	.05080	.00490	.08790	-.00480	.00310	.00670	.04200	.08530	.49230
4.591	7.140	-.04000	.07670	.00550	.08620	-.00530	.00270	.00660	.06630	.08760	.75710
4.591	8.200	-.05000	.10400	.00600	.08440	-.00460	.00270	.00640	.09200	.09080	1.01300
4.591	9.270	-.06000	.13160	.00640	.08310	-.00440	.00270	.00630	.11770	.09550	1.23320
4.591	10.330	-.06000	.16040	.00650	.08150	-.00410	.00260	.00620	.14460	.10120	1.42840
4.591	11.400	-.07000	.19040	.00680	.08030	-.00400	.00250	.00620	.17230	.10850	1.58790
4.591	12.480	-.08000	.22120	.00680	.07910	-.00360	.00230	.00620	.20060	.11720	1.71100
4.591	13.550	-.08000	.25340	.00670	.07780	-.00290	.00210	.00630	.23000	.12700	1.81030
4.591	14.610	-.09000	.28600	.00680	.07650	-.00220	.00180	.00630	.25950	.13830	1.87620
4.591	15.700	-.10000	.32070	.00660	.07530	-.00130	.00160	.00630	.29060	.15130	1.91980
4.591	16.780	-.10000	.35480	.00740	.07410	-.00060	.00140	.00640	.32070	.16530	1.93910
4.591	17.850	-.11000	.39010	.00770	.07280	.00000	.00120	.00660	.35160	.18100	1.94230
4.591	18.940	-.12000	.42660	.00830	.07210	.00090	.00100	.00680	.38280	.19870	1.92570
4.591	20.010	-.12000	.46430	.00830	.07110	.00190	.00080	.00690	.41480	.21780	1.90400
4.591	21.080	-.13000	.50200	.00860	.07010	.00280	.00060	.00710	.44610	.23820	1.87290
4.591	22.170	-.13000	.54100	.00860	.06950	.00360	.00040	.00740	.47790	.26070	1.83280
4.591	23.250	-.14000	.58070	.00890	.06880	.00460	.00010	.00780	.50970	.28470	1.79030
4.591	24.320	-.15000	.62050	.00880	.06800	.00560	-.00010	.00820	.54090	.30990	1.74520
4.591	25.400	-.15000	.66190	.00860	.06720	.00660	-.00030	.00870	.57260	.33710	1.69850
4.591	26.460	-.16000	.70330	.00820	.06660	.00730	-.00030	.00900	.60360	.36560	1.65100
4.591	27.540	-.16000	.74550	.00780	.06590	.00800	-.00040	.00930	.63440	.39580	1.60280
4.591	28.590	-.17000	.78710	.00730	.06520	.00880	-.00050	.00960	.66390	.42670	1.55590
4.591	29.640	-.18000	.83000	.00680	.06450	.00970	-.00060	.01010	.69360	.45940	1.50970
4.591	30.690	-.18000	.87360	.00540	.06380	.00970	-.00050	.01030	.72290	.49360	1.46440
4.591	31.690	-.19000	.91440	.00430	.06320	.01020	-.00050	.01070	.74920	.52720	1.42110
4.591	32.530	-.19000	.95030	.00360	.06290	.01070	-.00060	.01100	.77170	.55710	1.38520
	GRADIENT	-.00510	.02218	-.00006	-.00279	.00056	-.00034	-.00036	.02074	-.00275	.21633

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY030) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1047/ 0 RN/L = 18.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.160	.00000	-.08790	.00430	.10340	-.00840	.00520	.00870	-.08760	.09550	-.91800
4.591	-.920	-.01000	-.06390	.00400	.10030	-.00770	.00490	.00810	-.06540	.09100	-.71890
4.591	2.010	-.02000	-.04040	.00410	.09740	-.00710	.00440	.00770	-.04350	.08760	-.49640
4.591	3.100	-.02000	-.01620	.00390	.09450	-.00650	.00400	.00730	-.02080	.08510	-.24500
4.591	4.230	-.03000	.00970	.00420	.09160	-.00570	.00350	.00700	.00360	.08370	.04300
4.591	5.390	-.04000	.03720	.00450	.08890	-.00510	.00310	.00680	.02940	.08360	.35260
4.591	6.600	-.04000	.06660	.00480	.08660	-.00450	.00290	.00660	.05720	.08520	.67120
4.591	7.820	-.05000	.09680	.00540	.08470	-.00440	.00270	.00640	.08550	.08870	.96470
4.591	9.040	-.06000	.12910	.00570	.08290	-.00410	.00260	.00630	.11580	.09370	1.23540
4.591	10.270	-.06000	.16250	.00580	.08120	-.00400	.00250	.00620	.14700	.10050	1.46200
4.591	11.520	-.07000	.19740	.00600	.07960	-.00370	.00230	.00620	.17910	.10910	1.64100
4.591	12.780	-.08000	.23340	.00600	.07820	-.00330	.00210	.00620	.21220	.11980	1.77300
4.591	14.050	-.09000	.27170	.00590	.07680	-.00230	.00180	.00620	.24700	.13220	1.86730
4.591	15.330	-.09000	.31210	.00590	.07530	-.00150	.00160	.00630	.28330	.14700	1.92690
4.591	16.600	-.10000	.35320	.00630	.07380	-.00060	.00130	.00640	.31980	.16360	1.95370
4.591	17.890	-.11000	.39510	.00660	.07260	.00020	.00110	.00650	.35720	.18290	1.95280
4.591	19.190	-.12000	.44010	.00690	.07150	.00110	.00090	.00680	.39480	.20430	1.93200
4.591	20.490	-.12000	.48590	.00700	.07040	.00230	.00060	.00700	.43340	.22820	1.89880
4.591	21.810	-.13000	.53350	.00740	.06940	.00340	.00030	.00740	.47260	.25500	1.85330
4.591	23.150	-.14000	.58290	.00740	.06860	.00450	.00010	.00780	.51220	.28470	1.79930
4.591	24.490	-.15000	.63300	.00700	.06770	.00580	-.00010	.00840	.55140	.31650	1.74210
4.591	25.840	-.15000	.68540	.00660	.06680	.00700	-.00030	.00880	.59130	.35150	1.68190
4.591	27.200	-.16000	.73980	.00590	.06600	.00800	-.00040	.00930	.63150	.38970	1.62050
4.591	28.570	-.17000	.79450	.00560	.06520	.00900	-.00040	.00970	.67050	.43000	1.55900
4.591	29.920	-.18000	.84960	.00490	.06450	.00990	-.00050	.01020	.70820	.47260	1.49840
4.591	31.110	-.18000	.89620	.00410	.06380	.01030	-.00050	.01060	.73850	.51070	1.44610
4.591	32.010	-.19000	.93280	.00360	.06340	.01070	-.00050	.01090	.76170	.54130	1.40690
4.591	32.480	-.19000	.95150	.00280	.06320	.01100	-.00050	.01110	.77310	.55740	1.38690
4.591	32.690	-.19000	.95920	.00320	.06270	.01090	-.00060	.01110	.77770	.56410	1.37870
	GRADIENT	-.00638	.02216	-.00003	-.00268	.00060	-.00039	-.00038	.02071	-.00269	.21872

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY031) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474 8100 INCHES YMRP = 0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = .000 RWGRIT = .000
A-RATE = 3.000 A-SCHD = 1.000
PHI = .000

RUN NO. 67/ 0 RN/L = 15.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	1.090	-.01000	-.06780	.00470	.10090	-.00690	.00540	.00870	-.06960	.09210	-.75590
4.591	2.350	-.02000	-.04100	.00470	.09770	-.00610	.00490	.00820	-.04460	.08840	-.50500
4.591	3.610	-.03000	-.01330	.00480	.09450	-.00570	.00430	.00780	-.01870	.08590	-.21830
4.591	4.850	-.03000	.01600	.00530	.09140	-.00520	.00380	.00740	.00890	.08480	.10510
4.591	6.100	-.04000	.04630	.00570	.08870	-.00480	.00340	.00720	.03740	.08540	.43890
4.591	7.340	-.05000	.07680	.00620	.08640	-.00440	.00310	.00700	.06620	.08780	.75390
4.591	8.580	-.06000	.10880	.00670	.08450	-.00410	.00300	.00690	.09610	.09210	1.04390
4.591	9.830	-.06000	.14230	.00730	.08280	-.00390	.00280	.00680	.12740	.09810	1.29790
4.591	11.090	-.07000	.17660	.00760	.08130	-.00380	.00270	.00680	.15920	.10590	1.50280
4.591	12.340	-.08000	.21250	.00790	.07970	-.00350	.00250	.00670	.19220	.11540	1.66560
4.591	13.620	-.08000	.25040	.00840	.07820	-.00310	.00230	.00670	.22680	.12710	1.78360
4.591	14.890	-.09000	.28940	.00910	.07680	-.00230	.00220	.00680	.26200	.14070	1.86160
4.591	16.160	-.10000	.33040	.00950	.07540	-.00160	.00200	.00690	.29860	.15650	1.90790
4.591	17.440	-.11000	.37300	.01000	.07400	-.00090	.00190	.00700	.33620	.17450	1.92610
4.591	18.720	-.11000	.41710	.01060	.07270	.00000	.00170	.00720	.37440	.19490	1.92100
4.591	20.000	-.12000	.46170	.01060	.07160	.00070	.00150	.00740	.41220	.21730	1.89660
4.591	21.280	-.13000	.50720	.01070	.07060	.00130	.00120	.00770	.45000	.24210	1.85880
4.591	22.570	-.14000	.55450	.01080	.06970	.00220	.00090	.00800	.48850	.26950	1.81250
4.591	23.850	-.14000	.60220	.01050	.06880	.00290	.00060	.00850	.52640	.29870	1.76190
4.591	25.150	-.15000	.65210	.01030	.06780	.00370	.00020	.00890	.56500	.33080	1.70800
4.591	26.440	-.16000	.70280	.00990	.06700	.00440	.00000	.00930	.60320	.36530	1.65090
4.591	27.710	-.16000	.75360	.00910	.06620	.00490	.00000	.00970	.64030	.40160	1.59420
4.591	28.990	-.17000	.80550	.00860	.06550	.00550	-.00010	.01020	.67690	.44040	1.53690
4.591	30.240	-.18000	.85730	.00730	.06490	.00590	.00000	.01070	.71220	.48070	1.48150
4.591	31.300	-.18000	.90180	.00590	.06440	.00580	.00000	.01110	.74150	.51640	1.43580
4.591	31.950	-.19000	.93090	.00500	.06390	.00570	.00000	.01130	.76050	.53980	1.40880
4.591	32.220	-.19000	.94410	.00400	.06360	.00580	.00000	.01140	.76920	.55010	1.39810
	GRADIENT	-.00559	.02225	.00015	-.00253	.00044	-.00043	-.00034	.02084	-.00195	.22879

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY032) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1067/ 0 RN/L = 16.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.960	.00000	-.11090	.00560	.10660	-.00860	.00590	.00970	-.10920	.10040	-1.08760
4.591	-.410	.00000	-.09830	.00530	.10470	-.00830	.00560	.00940	-.09760	.09740	-1.00170
4.591	.460	-.01000	-.07880	.00470	.10220	-.00790	.00540	.00890	-.07960	.09330	-.85240
4.591	1.360	-.01000	-.05920	.00450	.09980	-.00740	.00500	.00850	-.06130	.09000	-.68120
4.591	2.320	-.02000	-.03840	.00450	.09730	-.00700	.00460	.00810	-.04200	.08720	-.48210
4.591	3.280	-.02000	-.01680	.00440	.09480	-.00660	.00420	.00780	-.02170	.08520	-.25550
4.591	4.260	-.03000	.00590	.00480	.09240	-.00600	.00380	.00760	-.00030	.08400	-.00360
4.591	5.240	-.03000	.02920	.00520	.09010	-.00550	.00340	.00730	.02160	.08370	.25810
4.591	6.240	-.04000	.05350	.00560	.08810	-.00530	.00320	.00720	.04450	.08470	.52580
4.591	7.260	-.05000	.07870	.00590	.08630	-.00500	.00300	.00700	.06830	.08690	.78560
4.591	8.270	-.05000	.10470	.00650	.08490	-.00450	.00290	.00690	.09260	.09040	1.02470
4.591	9.300	-.06000	.13230	.00660	.08350	-.00440	.00280	.00680	.11850	.09510	1.24540
4.591	10.330	-.06000	.16060	.00710	.08220	-.00440	.00270	.00680	.14480	.10100	1.43370
4.591	11.390	-.07000	.19060	.00720	.08080	-.00420	.00260	.00670	.17260	.10820	1.59450
4.591	12.440	-.08000	.22070	.00720	.07950	-.00380	.00240	.00670	.20030	.11660	1.71790
4.591	13.520	-.08000	.25260	.00770	.07830	-.00330	.00220	.00670	.22930	.12670	1.80990
4.591	14.600	-.09000	.28620	.00800	.07710	-.00270	.00200	.00680	.25970	.13840	1.87670
4.591	15.690	-.10000	.32110	.00860	.07600	-.00210	.00190	.00680	.29090	.15160	1.91870
4.591	16.780	-.10000	.35650	.00900	.07470	-.00150	.00180	.00690	.32220	.16610	1.93890
4.591	17.900	-.11000	.39460	.00940	.07340	-.00060	.00160	.00710	.35560	.18300	1.94310
4.591	19.010	-.12000	.43340	.00950	.07240	.00010	.00150	.00720	.38890	.20150	1.92960
4.591	20.120	-.12000	.47270	.00960	.07150	.00070	.00130	.00740	.42210	.22180	1.90330
4.591	21.250	-.13000	.51290	.00970	.07060	.00120	.00110	.00770	.45550	.24390	1.86770
4.591	22.400	-.13000	.55430	.00960	.06980	.00190	.00090	.00800	.48910	.26800	1.82470
4.591	23.530	-.14000	.59720	.00950	.06900	.00260	.00060	.00840	.52320	.29410	1.77910
4.591	24.690	-.15000	.64160	.00910	.06810	.00340	.00030	.00880	.55790	.32230	1.73100
4.591	26.150	-.16000	.69860	.00820	.06710	.00430	.00010	.00930	.60110	.36070	1.66620
4.591	27.320	-.16000	.74600	.00770	.06660	.00480	.00000	.00970	.63600	.39420	1.61310
4.591	28.470	-.17000	.79270	.00710	.06600	.00550	.00000	.01010	.66930	.42870	1.56120
4.591	29.660	-.17000	.84160	.00580	.06510	.00600	.00000	.01060	.70320	.46590	1.50930
4.591	31.040	-.18000	.89860	.00450	.06420	.00590	.00000	.01110	.74100	.51140	1.44890
4.591	32.100	-.19000	.94170	.00340	.06380	.00590	.00000	.01140	.76820	.54740	1.40320
	GRADIENT	-.00564	.02224	-.00017	-.00270	.00049	-.00040	-.00041	.02073	-.00316	.20635

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY033) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 68/ 0 RN/L = 15.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.710	.00000	-.10550	.00460	.10620	-.00920	.00580	.00950	-.10430	.10000	-1.04250
4.591	.700	-.01000	-.07520	.00440	.10230	-.00870	.00510	.00880	-.07640	.09380	-.81480
4.591	1.800	-.02000	-.05070	.00390	.09930	-.00760	.00480	.00830	-.05360	.09000	-.59580
4.591	2.830	-.02000	-.02730	.00420	.09640	-.00630	.00460	.00800	-.03160	.08720	-.36300
4.591	3.890	-.03000	-.00320	.00480	.09360	-.00600	.00410	.00770	-.00910	.08540	-.10650
4.591	4.940	-.03000	.02160	.00510	.09110	-.00540	.00370	.00740	.01440	.08480	.16980
4.591	6.010	-.04000	.04690	.00560	.08870	-.00520	.00340	.00720	.03810	.08530	.44760
4.591	7.070	-.05000	.07320	.00600	.08680	-.00490	.00320	.00700	.06290	.08720	.72200
4.591	8.130	-.05000	.10000	.00630	.08520	-.00460	.00300	.00700	.08800	.09040	.97360
4.591	9.200	-.06000	.12840	.00640	.08360	-.00430	.00290	.00690	.11470	.09510	1.20610
4.591	10.260	-.06000	.15700	.00690	.08230	-.00420	.00280	.00680	.14130	.10080	1.40170
4.591	11.340	-.07000	.18690	.00740	.08090	-.00420	.00270	.00670	.16900	.10790	1.56600
4.591	12.410	-.08000	.21770	.00780	.07970	-.00380	.00260	.00670	.19730	.11640	1.69440
4.591	13.490	-.08000	.24920	.00810	.07850	-.00330	.00240	.00670	.22600	.12620	1.79060
4.591	14.560	-.09000	.28250	.00820	.07730	-.00270	.00220	.00680	.25610	.13760	1.86120
4.591	15.640	-.10000	.31630	.00840	.07610	-.00200	.00200	.00680	.28640	.15030	1.90510
4.591	16.720	-.10000	.35140	.00870	.07500	-.00160	.00190	.00690	.31750	.16460	1.92810
4.591	17.790	-.11000	.38790	.00900	.07370	-.00080	.00170	.00700	.34940	.18050	1.93610
4.591	18.870	-.12000	.42490	.00920	.07270	-.00010	.00160	.00720	.38130	.19790	1.92630
4.591	19.960	-.12000	.46330	.00950	.07160	.00050	.00140	.00730	.41400	.21730	1.90510
4.591	21.040	-.13000	.50190	.00970	.07080	.00110	.00130	.00760	.44610	.23810	1.87310
4.591	22.120	-.13000	.54150	.00980	.07000	.00170	.00100	.00780	.47850	.26070	1.83640
4.591	23.190	-.14000	.58120	.01000	.06930	.00250	.00070	.00820	.51030	.28460	1.79330
4.591	24.280	-.15000	.62200	.00990	.06850	.00330	.00040	.00870	.54240	.31030	1.74750
4.591	25 350	-.15000	.66340	.00940	.06770	.00400	.00010	.00900	.57420	.33740	1.70160
4.591	26.430	-.16000	.70660	.00880	.06710	.00440	.00000	.00940	.60670	.36690	1.65360
4.591	27.490	-.16000	.74830	.00820	.06660	.00470	.00000	.00960	.63700	.39680	1.60520
4.591	28.550	-.17000	.79180	.00780	.06600	.00520	.00000	.01010	.66800	.42900	1.55710
4.591	29.600	-.17000	.83430	.00690	.06530	.00580	-.00010	.01050	.69730	.46160	1.51050
4.591	30.650	-.18000	.87700	.00550	.06460	.00570	.00000	.01080	.72590	.49540	1.46530
4.591	31.660	-.19000	.91980	.00420	.06380	.00570	.00000	.01110	.75380	.53000	1.42220
4.591	32.510	-.19000	.95680	.00320	.06340	.00600	.00000	.01150	.77720	.56060	1.38630
	GRADIENT	-.00545	.02250	.00010	-.00269	.00073	-.00035	-.00037	.02102	-.00271	.21571

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OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY034) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1068/ 0 RN/L = 16.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.980	.00000	-.10930	.00460	.10650	-.00880	.00590	.00970	-.10760	.10010	-1.07470
4.591	-.480	.00000	-.09810	.00440	.10490	-.00860	.00560	.00940	-.09720	.09730	-.99910
4.591	.360	-.01000	-.07890	.00430	.10240	-.00820	.00530	.00890	-.07950	.09340	-.85050
4.591	1.380	-.01000	-.05640	.00390	.09950	-.00770	.00500	.00850	-.05860	.08960	-.65370
4.591	2.430	-.02000	-.03380	.00390	.09670	-.00710	.00460	.00800	-.03750	.08660	-.43310
4.591	3.520	-.03000	-.00890	.00400	.09390	-.00650	.00410	.00770	-.01410	.08450	-.16730
4.591	4.640	-.03000	.01740	.00480	.09120	-.00590	.00360	.00750	.01060	.08370	.12700
4.591	5.810	-.04000	.04580	.00510	.08880	-.00540	.00330	.00720	.03740	.08430	.44430
4.591	7.020	-.05000	.07600	.00560	.08660	-.00510	.00310	.00710	.06590	.08660	.76080
4.591	8.240	-.05000	.10710	.00580	.08480	-.00480	.00290	.00690	.09510	.09060	1.04870
4.591	9.460	-.06000	.13960	.00610	.08310	-.00460	.00270	.00680	.12550	.09630	1.30230
4.591	10.700	-.07000	.17410	.00640	.08150	-.00450	.00270	.00680	.15760	.10390	1.51660
4.591	11.950	-.07000	.20970	.00690	.08000	-.00410	.00250	.00670	.19040	.11320	1.68210
4.591	13.210	-.08000	.24650	.00730	.07860	-.00360	.00230	.00670	.22400	.12440	1.80030
4.591	14.480	-.09000	.28570	.00720	.07720	-.00290	.00210	.00680	.25940	.13780	1.88210
4.591	15.750	-.10000	.32570	.00760	.07580	-.00220	.00180	.00680	.29520	.15310	1.92800
4.591	17.030	-.10000	.36790	.00800	.07430	-.00140	.00170	.00690	.33250	.17060	1.94830
4.591	18.320	-.11000	.41200	.00810	.07300	-.00060	.00160	.00710	.37080	.19070	1.94380
4.591	19.610	-.12000	.45780	.00820	.07180	.00020	.00140	.00730	.40990	.21330	1.92120
4.591	20.910	-.13000	.50430	.00850	.07070	.00090	.00110	.00760	.44880	.23820	1.88400
4.591	22.250	-.13000	.55400	.00840	.06970	.00190	.00080	.00790	.48950	.26660	1.83570
4.591	23.600	-.14000	.60430	.00840	.06880	.00260	.00050	.00840	.52960	.29740	1.78070
4.591	24.950	-.15000	.65620	.00780	.06790	.00370	.00020	.00900	.56980	.33080	1.72230
4.591	26.310	-.16000	.70960	.00740	.06710	.00440	.00000	.00940	.61000	.36720	1.66100
4.591	27.670	-.16000	.76440	.00640	.06640	.00510	.00000	.00980	.65010	.40640	1.59960
4.591	29.030	-.17000	.81910	.00580	.06550	.00570	.00000	.01040	.68840	.44750	1.53810
4.591	30.360	-.18000	.87380	.00450	.06490	.00610	.00000	.01080	.72540	.49050	1.47880
4.591	31.500	-.18000	.91940	.00370	.06410	.00610	.00000	.01120	.75470	.52810	1.42920
4.591	32.340	-.19000	.95380	.00300	.06380	.00620	.00000	.01150	.77610	.55710	1.39300
4.591	32.710	-.19000	.96760	.00280	.06360	.00590	.00000	.01160	.78420	.56950	1.37700
	GRADIENT	-.00594	.02242	-.00001	-.00272	.00052	-.00039	-.00040	.02091	-.00297	.21260

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY035) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 59/ 0 RN/L = 15.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.780	.02000	-.10420	.00350	.10640	.00030	-.00570	-.00820	-.10280	.10070	-1.02050
4.591	-.450	.02000	-.09810	.00300	.10580	-.00030	-.00570	-.00810	-.09730	.09940	-.97880
4.591	.430	.01000	-.08000	.00290	.10340	-.00080	-.00550	-.00780	-.08070	.09560	-.84410
4.591	1.630	.00000	-.05580	.00310	.10020	-.00110	-.00500	-.00730	-.05840	.09140	-.63930
4.591	2.880	.00000	-.02810	.00370	.09690	-.00100	-.00450	-.00690	-.03260	.08810	-.37040
4.591	4.140	-.01000	.00060	.00430	.09360	-.00090	-.00420	-.00650	-.00560	.08610	-.06520
4.591	5.390	-.02000	.03030	.00450	.09050	-.00070	-.00390	-.00620	.02240	.08560	.26150
4.591	6.630	-.02000	.06090	.00510	.08790	-.00080	-.00370	-.00610	.05120	.08690	58870
4.591	7.880	-.03000	.09210	.00550	.08580	-.00060	-.00360	-.00600	.08050	.09020	89200
4.591	9.120	-.04000	.12420	.00630	.08410	-.00020	-.00340	-.00590	.11050	.09530	1.15920
4.591	10.370	-.05000	.15800	.00680	.08260	.00000	-.00330	-.00600	.14190	.10220	1.38780
4.591	11.630	-.06000	.19360	.00700	.08100	.00000	-.00300	-.00610	.17480	.11090	1.57630
4.591	12.890	-.07000	.23020	.00730	.07970	.00020	-.00280	-.00620	.20840	.12140	1.71550
4.591	14.170	-.08000	.26850	.00770	.07810	.00030	-.00250	-.00630	.24320	.13390	1.81600
4.591	15.440	-.08000	.30800	.00800	.07670	.00040	-.00220	-.00640	.27860	.14830	1.87830
4.591	16.720	-.09000	.35040	.00840	.07520	.00060	-.00180	-.00650	.31620	.16520	1.91360
4.591	18.000	-.10000	.39390	.00860	.07400	.00060	-.00150	-.00670	.35420	.18440	1.92090
4.591	19.270	-.11000	.43840	.00890	.07280	.00070	-.00130	-.00690	.39250	.20580	1.90660
4.591	20.550	-.12000	.48320	.00920	.07170	.00090	-.00120	-.00720	.43010	.22920	1.87640
4.591	21.840	-.13000	.52920	.00930	.07040	.00120	-.00110	-.00740	.46800	.25470	1.83720
4.591	23.130	-.13000	.57720	.00920	.06940	.00140	-.00100	-.00760	.50670	.28300	1.79030
4.591	24.420	-.14000	.62620	.00890	.06850	.00170	-.00090	-.00780	.54520	.31380	1.73740
4.591	25.710	-.15000	.67720	.00840	.06760	.00190	-.00080	-.00820	.58440	.34730	1.68250
4.591	26.990	-.16000	.72770	.00760	.06680	.00190	-.00070	-.00860	.62180	.38250	1.62550
4.591	28.270	-.16000	.78060	.00700	.06620	.00200	-.00060	-.00910	.66000	.42080	1.56850
4.591	29.540	-.17000	.83160	.00600	.06550	.00220	-.00050	-.00950	.69530	.45990	1.51180
4.591	30.730	-.18000	.88180	.00480	.06500	.00200	-.00030	-.01010	.72890	.49940	1.45940
4.591	31.630	-.18000	.92060	.00350	.06460	.00180	-.00010	-.01060	.75420	.53090	1.42070
4.591	32.100	-.18000	.94110	.00290	.06410	.00170	.00000	-.01090	.76740	.54750	1.40180
	GRADIENT	-.00606	.02126	.00020	-.00263	-.00021	.00033	.00035	.01970	-.00305	.19245

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY036) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPOBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1059/ 0 RN/L = 16.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.770	.02000	-.10360	.00320	.10620	.00040	-.00570	-.00820	-.10230	.09960	-1.02700
4.591	.010	.01000	-.08690	.00280	.10370	-.00010	-.00540	-.00780	-.08690	.09560	-.90900
4.591	.910	.00000	-.06770	.00270	.10140	-.00060	-.00490	-.00750	-.06920	.09210	-.75140
4.591	1.850	.00000	-.04750	.00300	.09890	-.00110	-.00460	-.00720	-.05040	.08910	-.56600
4.591	2.810	.00000	-.02610	.00340	.09650	-.00140	-.00440	-.00690	-.03040	.08680	-.35020
4.591	3.780	.00000	-.00380	.00360	.09400	-.00170	-.00410	-.00660	-.00950	.08530	-.11180
4.591	4.750	-.01000	.01900	.00410	.09160	-.00180	-.00400	-.00640	.01200	.08450	.14300
4.591	5.740	-.02000	.04250	.00440	.08930	-.00190	-.00390	-.00620	.03420	.08460	.40420
4.591	6.760	-.02000	.06760	.00460	.08740	-.00200	-.00370	-.00610	.05780	.08620	.67130
4.591	7.760	-.03000	.09280	.00490	.08590	-.00160	-.00360	-.00600	.08150	.08910	.91520
4.591	8.780	-.04000	.11930	.00560	.08460	-.00110	-.00360	-.00600	.10630	.09320	1.13970
4.591	9.820	-.05000	.14730	.00600	.08330	-.00090	-.00340	-.00600	.13240	.09860	1.34210
4.591	10.860	-.05000	.17610	.00630	.08200	-.00090	-.00320	-.00610	.15910	.10520	1.51260
4.591	11.900	-.06000	.20670	.00650	.08070	-.00060	-.00300	-.00620	.18740	.11310	1.65580
4.591	12.970	-.07000	.23760	.00650	.07950	-.00050	-.00280	-.00620	.21570	.12240	1.76230
4.591	14.050	-.07000	.27050	.00690	.07830	-.00030	-.00250	-.00630	.24540	.13330	1.84110
4.591	15.130	-.08000	.30430	.00720	.07690	-.00020	-.00220	-.00640	.27590	.14540	1.89740
4.591	16.220	-.09000	.33980	.00750	.07560	-.00010	-.00190	-.00660	.30750	.15930	1.92990
4.591	17.320	-.10000	.37690	.00770	.07440	-.00020	-.00160	-.00670	.34010	.17510	1.94200
4.591	18.430	-.10000	.41540	.00770	.07310	.00000	-.00140	-.00690	.37360	.19270	1.93890
4.591	19.540	-.11000	.45390	.00790	.07210	.00020	-.00120	-.00700	.40640	.21190	1.91770
4.591	20.660	-.12000	.49380	.00810	.07120	.00050	-.00110	-.00720	.43980	.23300	1.88740
4.591	21.790	-.12000	.53430	.00820	.07030	.00070	-.00110	-.00740	.47310	.25580	1.84900
4.591	22.940	-.13000	.57730	.00800	.06950	.00100	-.00100	-.00760	.50770	.28130	1.80480
4.591	24.070	-.14000	.62000	.00770	.06870	.00130	-.00090	-.00780	.54150	.30800	1.75760
4.591	25.240	-.15000	.66620	.00720	.06780	.00170	-.00090	-.00800	.57720	.33790	1.70800
4.591	26.410	-.15000	.71210	.00630	.06720	.00190	-.00070	-.00840	.61150	.36950	1.65490
4.591	27.580	-.16000	.75990	.00580	.06650	.00190	-.00050	-.00890	.64650	.40350	1.60210
4.591	28.720	-.17000	.80620	.00500	.06590	.00220	-.00050	-.00920	.67930	.43800	1.55060
4.591	29.940	-.17000	.85680	.00400	.06520	.00240	-.00040	-.00970	.71390	.47710	1.49640
4.591	31.320	-.18000	.91390	.00230	.06440	.00210	-.00010	-.01040	.75140	.52320	1.43600
4.591	32.200	-.18000	.94880	.00130	.06400	.00190	.00000	-.01090	.77300	.55290	1.39800
	GRADIENT	-.00418	.02215	.00020	-.00262	-.00041	.00031	.00032	.02065	-.00272	.21232

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY037) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 60/ 0 RN/L = 15.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.670	.02000	-.10300	.00370	.10630	.00100	-.00580	-.00850	-.10180	.10030	-1.01570
4.591	.710	.01000	-.07410	.00370	.10240	.00080	-.00520	-.00780	-.07530	.09410	-.80000
4.591	1.810	.00000	-.05020	.00340	.09950	.00040	-.00470	-.00740	-.05310	.09050	-.58640
4.591	2.840	.00000	-.02770	.00330	.09680	-.00060	-.00440	-.00700	-.03210	.08800	-.36500
4.591	3.900	-.01000	-.00300	.00360	.09430	-.00080	-.00400	-.00660	-.00890	.08640	-.10390
4.591	4.950	-.01000	.02120	.00390	.09170	-.00080	-.00390	-.00640	.01390	.08560	.16230
4.591	6.010	-.02000	.04640	.00430	.08920	-.00090	-.00380	-.00620	.03760	.08600	.43690
4.591	7.080	-.03000	.07370	.00450	.08720	-.00100	-.00360	-.00610	.06330	.08800	.71940
4.591	8.140	-.04000	.10010	.00540	.08570	-.00050	-.00350	-.00600	.08800	.09130	.96420
4.591	9.200	-.04000	.12840	.00600	.08440	-.00020	-.00340	-.00600	.11450	.09610	1.19200
4.591	10.280	-.05000	.15720	.00660	.08290	.00000	-.00320	-.00610	.14130	.10180	1.38710
4.591	11.330	-.06000	.18690	.00680	.08170	.00010	-.00310	-.00610	.16880	.10890	1.54930
4.591	12.400	-.06000	.21750	.00680	.08030	.00030	-.00290	-.00620	.19690	.11720	1.68000
4.591	13.490	-.07000	.24990	.00710	.07910	.00030	-.00270	-.00620	.22640	.12720	1.78030
4.591	14.570	-.08000	.28300	.00710	.07790	.00040	-.00240	-.00630	.25640	.13850	1.85050
4.591	15.640	-.09000	.31630	.00740	.07660	.00040	-.00210	-.00640	.28620	.15090	1.89590
4.591	16.720	-.09000	.35150	.00790	.07540	.00040	-.00180	-.00660	.31740	.16520	1.92080
4.591	17.810	-.10000	.38910	.00780	.07420	.00050	-.00150	-.00670	.35040	.18150	1.92960
4.591	18.880	-.11000	.42630	.00790	.07300	.00060	-.00130	-.00690	.38250	.19900	1.92220
4.591	19.950	-.11000	.46390	.00840	.07200	.00080	-.00120	-.00710	.41430	.21800	1.90030
4.591	21.040	-.12000	.50340	.00860	.07110	.00110	-.00100	-.00720	.44730	.23920	1.86970
4.591	22.120	-.13000	.54290	.00890	.07030	.00130	-.00090	-.00740	.47960	.26170	1.83260
4.591	23.200	-.13000	.58310	.00870	.06960	.00130	-.00090	-.00760	.51190	.28580	1.79060
4.591	24.280	-.14000	.62390	.00840	.06890	.00150	-.00080	-.00780	.54380	.31170	1.74460
4.591	25.350	-.15000	.66570	.00770	.06810	.00170	-.00080	-.00800	.57610	.33900	1.69930
4.591	26.430	-.15000	.70800	.00700	.06740	.00190	-.00070	-.00830	.60780	.36790	1.65190
4.591	27.490	-.16000	.75060	.00630	.06680	.00180	-.00050	-.00870	.63890	.39810	1.60470
4.591	28.550	-.16000	.79450	.00560	.06630	.00180	-.00040	-.00920	.67020	.43050	1.55680
4.591	29.600	-.17000	.83730	.00490	.06560	.00200	-.00050	-.00950	.69980	.46330	1.51050
4.591	30.650	-.18000	.88100	.00360	.06490	.00180	-.00020	-.01000	.72920	.49770	1.46490
4.591	31.660	-.18000	.92410	.00220	.06420	.00150	.00000	-.01050	.75730	.53250	1.42190
4.591	32.500	-.19000	.96050	.00130	.06370	.00150	.00000	-.01100	.78030	.56280	1.38640
	GRADIENT	-.00547	.02212	.00001	-.00259	-.00038	.00035	.00038	.02061	-.00259	.21095

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY038) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 5.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1060/ 0 RN/L = 16.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-1.000	.02000	-.10860	.00310	.10690	.00040	-.00560	-.00850	-.10690	.10070	-1.06110
4.591	-.640	.02000	-.10040	.00290	.10570	.00020	-.00550	-.00820	-.09930	.09860	-1.00650
4.591	.100	.01000	-.08340	.00250	.10350	-.00020	-.00520	-.00790	-.08360	.09500	-.87920
4.591	1.110	.00000	-.06180	.00250	.10070	-.00070	-.00480	-.00750	-.06360	.09120	-.69760
4.591	2.160	.00000	-.03920	.00270	.09800	-.00110	-.00440	-.00710	-.04250	.08810	-.48320
4.591	3.240	.00000	-.01500	.00310	.09530	-.00140	-.00420	-.00680	-.01990	.08590	-.23210
4.591	4.360	-.01000	.01090	.00330	.09250	-.00170	-.00400	-.00650	.00450	.08460	.05330
4.591	5.530	-.02000	.03840	.00370	.08990	-.00190	-.00380	-.00630	.03030	.08460	.35880
4.591	6.730	-.02000	.06840	.00400	.08750	-.00190	-.00360	-.00610	.05870	.08640	.67940
4.591	7.950	-.03000	.09940	.00470	.08570	-.00150	-.00350	-.00600	.08780	.09010	.97460
4.591	9.170	-.04000	.13210	.00550	.08420	-.00100	-.00340	-.00610	.11830	.09560	1.23710
4.591	10.400	-.05000	.16570	.00580	.08260	-.00080	-.00320	-.00610	.14960	.10270	1.45630
4.591	11.650	-.06000	.20030	.00630	.08110	-.00050	-.00300	-.00620	.18160	.11150	1.62850
4.591	12.900	-.07000	.23760	.00610	.07950	-.00040	-.00270	-.00620	.21570	.12220	1.76420
4.591	14.180	-.08000	.27630	.00630	.07810	-.00030	-.00250	-.00630	.25090	.13510	1.85620
4.591	15.450	-.08000	.31690	.00650	.07650	-.00030	-.00210	-.00650	.28730	.15000	1.91440
4.591	16.720	-.09000	.35880	.00660	.07500	-.00010	-.00170	-.00660	.32450	.16700	1.94230
4.591	18.010	-.10000	.40250	.00680	.07360	.00000	-.00140	-.00680	.36260	.18640	1.94450
4.591	19.300	-.11000	.44780	.00690	.07230	.00030	-.00120	-.00700	.40150	.20830	1.92690
4.591	20.580	-.12000	.49390	.00730	.07120	.00060	-.00110	-.00720	.44020	.23250	1.89350
4.591	21.900	-.13000	.54170	.00760	.07030	.00080	-.00100	-.00740	.47950	.25950	1.84770
4.591	23.230	-.13000	.59140	.00720	.06940	.00110	-.00100	-.00760	.51930	.28940	1.79460
4.591	24.550	-.14000	.64210	.00660	.06860	.00150	-.00090	-.00790	.55900	.32160	1.73780
4.591	25.880	-.15000	.69550	.00550	.06790	.00200	-.00090	-.00830	.59960	.35730	1.67820
4.591	27.220	-.16000	.74860	.00490	.06700	.00190	-.00070	-.00870	.63880	.39460	1.61850
4.591	28.570	-.16000	.80330	.00420	.06610	.00200	-.00050	-.00920	.67770	.43510	1.55760
4.591	29.930	-.17000	.85880	.00330	.06550	.00190	-.00030	-.00980	.71570	.47810	1.49690
4.591	31.100	-.18000	.90650	.00240	.06480	.00180	-.00010	-.01030	.74690	.51670	1.44550
4.591	31.990	-.18000	.94290	.00130	.06430	.00180	.00000	-.01070	.77000	.54710	1.40730
4.591	32.440	-.19000	.96160	.00060	.06410	.00200	.00000	-.01090	.78150	.56300	1.38810
4.591	32.710	-.19000	.97060	.00080	.06350	.00150	.00000	-.01110	.78680	.57100	1.37790
	GRADIENT	-.00528	.02214	.00006	-.00267	-.00040	.00031	.00036	.02063	-.00304	.20581

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY039) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. X0		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. Y0		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. Z0		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 50/ 0 RN/L = 16.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.560	.01000	-.07520	.00330	.10130	.00060	-.00530	-.00790	-.07610	.09360	-.81330
4.591	2.130	.00000	-.04230	.00410	.09740	.00050	-.00490	-.00740	-.04560	.08870	-.51420
4.591	3.350	.00000	-.01590	.00370	.09480	.00020	-.00460	-.00700	-.02100	.08650	-.24300
4.591	4.500	-.01000	.01180	.00450	.09150	.00010	-.00430	-.00670	.00510	.08490	.06080
4.591	5.680	-.02000	.04020	.00480	.08860	.00000	-.00390	-.00650	.03200	.08480	.37740
4.591	6.860	-.03000	.06820	.00460	.08670	-.00020	-.00380	-.00630	.05820	.08680	.67110
4.591	8.050	-.03000	.09820	.00530	.08480	-.00010	-.00370	-.00620	.08640	.09010	.95810
4.591	9.240	-.04000	.12920	.00640	.08330	.00010	-.00360	-.00620	.11530	.09540	1.20900
4.591	10.440	-.05000	.16130	.00660	.08170	.00040	-.00340	-.00620	.14530	.10190	1.42480
4.591	11.630	-.06000	.19490	.00680	.08040	.00060	-.00330	-.00620	.17630	.11030	1.59810
4.591	12.830	-.07000	.23020	.00710	.07910	.00070	-.00310	-.00630	.20870	.12050	1.73180
4.591	14.030	-.07000	.26700	.00690	.07770	.00090	-.00280	-.00630	.24220	.13230	1.83050
4.591	15.230	-.08000	.30410	.00710	.07620	.00100	-.00250	-.00640	.27560	.14550	1.89330
4.591	16.430	-.09000	.34330	.00730	.07470	.00120	-.00210	-.00660	.31050	.16090	1.92940
4.591	17.640	-.10000	.38280	.00780	.07350	.00110	-.00180	-.00670	.34500	.17810	1.93650
4.591	18.840	-.11000	.42480	.00760	.07230	.00120	-.00150	-.00680	.38140	.19770	1.92860
4.591	20.050	-.11000	.46750	.00770	.07130	.00140	-.00130	-.00700	.41750	.21940	1.90230
4.591	21.260	-.12000	.51010	.00800	.07050	.00150	-.00120	-.00720	.45280	.24280	1.86460
4.591	22.470	-.13000	.55450	.00780	.06960	.00150	-.00110	-.00730	.48900	.26850	1.82130
4.591	23.670	-.14000	.59930	.00790	.06860	.00170	-.00080	-.00750	.52460	.29580	1.77340
4.591	24.880	-.14000	.64610	.00750	.06790	.00210	-.00080	-.00770	.56110	.32580	1.72180
4.591	26.070	-.15000	.69280	.00670	.06730	.00220	-.00080	-.00810	.59630	.35750	1.66800
4.591	27.270	-.16000	.74020	.00590	.06670	.00240	-.00090	-.00850	.63120	.39100	1.61390
4.591	28.460	-.16000	.78890	.00480	.06590	.00260	-.00070	-.00890	.66610	.42650	1.56160
4.591	29.650	-.17000	.83820	.00370	.06520	.00280	-.00060	-.00930	.70030	.46400	1.50940
4.591	30.810	-.18000	.88650	.00230	.06430	.00240	-.00030	-.00980	.73260	.50220	1.45860
4.591	31.930	-.18000	.93400	.00080	.06360	.00240	-.00010	-.01040	.76340	.54090	1.41110
4.591	32.690	-.19000	.96750	-.00020	.06320	.00240	.00000	-.01070	.78450	.56880	1.37910
	GRADIENT	-.00461	.02199	.00025	-.00245	-.00014	.00025	.00031	.02052	-.00220	.22069

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OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY040) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1050/ 0 RN/L = 17.15 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.350	.01000	-.09240	.00320	.10330	.00040	-.00570	-.00820	-.09180	.09590	-.95770
4.591	.680	.01000	-.07000	.00300	.10050	-.00020	-.00520	-.00780	-.07110	.09150	-.77720
4.591	1.740	.00000	-.04720	.00330	.09780	-.00050	-.00480	-.00750	-.04990	.08810	-.56630
4.591	2.840	.00000	-.02280	.00340	.09500	-.00070	-.00450	-.00720	-.02700	.08550	-.31610
4.591	3.930	-.01000	.00230	.00360	.09240	-.00090	-.00430	-.00690	-.00340	.08400	-.04080
4.591	5.040	-.01000	.02830	.00400	.08970	-.00100	-.00410	-.00670	.02110	.08350	.25260
4.591	6.160	-.02000	.05500	.00420	.08720	-.00110	-.00400	-.00650	.04620	.08420	.54870
4.591	7.300	-.03000	.08330	.00450	.08530	-.00110	-.00380	-.00630	.07280	.08670	.84040
4.591	8.440	-.04000	.11250	.00530	.08390	-.00070	-.00360	-.00630	.10020	.09100	1.10120
4.591	9.610	-.04000	.14300	.00570	.08250	-.00040	-.00350	-.00630	.12870	.09670	1.33020
4.591	10.780	-.05000	.17550	.00600	.08110	-.00020	-.00340	-.00630	.15890	.10400	1.52700
4.591	11.950	-.06000	.20930	.00610	.07980	.00000	-.00320	-.00630	.19000	.11300	1.68100
4.591	13.150	-.07000	.24530	.00610	.07850	.00020	-.00300	-.00630	.22290	.12390	1.79930
4.591	14.350	-.08000	.28160	.00620	.07700	.00030	-.00270	-.00640	.25580	.13610	1.87850
4.591	15.570	-.08000	.32080	.00610	.07550	.00060	-.00240	-.00650	.29100	.15070	1.93100
4.591	16.800	-.09000	.36060	.00640	.07410	.00080	-.00200	-.00670	.32630	.16700	1.95390
4.591	18.040	-.10000	.40250	.00650	.07270	.00070	-.00170	-.00680	.36280	.18570	1.95290
4.591	19.280	-.11000	.44590	.00660	.07170	.00080	-.00150	-.00690	.40000	.20700	1.93210
4.591	20.540	-.12000	.49020	.00650	.07080	.00100	-.00130	-.00720	.43720	.23040	1.89730
4.591	21.810	-.12000	.53710	.00640	.06980	.00120	-.00120	-.00730	.47580	.25660	1.85420
4.591	23.070	-.13000	.58390	.00630	.06890	.00140	-.00090	-.00750	.51340	.28450	1.80430
4.591	24.360	-.14000	.63230	.00620	.06820	.00190	-.00090	-.00770	.55130	.31540	1.74780
4.591	25.660	-.15000	.68320	.00580	.06760	.00250	-.00090	-.00810	.59000	.34940	1.68880
4.591	26.980	-.16000	.73590	.00450	.06680	.00250	-.00080	-.00850	.62910	.38610	1.62940
4.591	28.240	-.16000	.78680	.00340	.06600	.00290	-.00070	-.00890	.66580	.42330	1.57280
4.591	29.520	-.17000	.84030	.00190	.06500	.00300	-.00060	-.00930	.70310	.46350	1.51680
4.591	31.200	-.18000	.91020	.00040	.06430	.00270	-.00020	-.01000	.74940	.51960	1.44210
4.591	32.380	-.19000	.95770	-.00070	.06360	.00270	.00000	-.01050	.77900	.55990	1.39140
4.591	32.600	-.19000	.96650	-.00100	.06300	.00260	.00000	-.01060	.78460	.56700	1.38370
	GRADIENT	-.00467	.02207	.00011	-.00255	-.00029	.00033	.00030	.02061	-.00277	.21424

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY041) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPOBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 49/ 0 RN/L = 16.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.120	.01000	-.08340	.00380	.10260	.00250	-.00580	-.00830	-.08360	.09530	-.87660
4.591	.580	.01000	-.07500	.00330	.10140	.00170	-.00560	-.00800	-.07600	.09350	-.81240
4.591	1.580	.00000	-.05420	.00320	.09870	.00070	-.00520	-.00770	-.05670	.09000	-.63070
4.591	2.810	.00000	-.02750	.00350	.09570	.00060	-.00480	-.00730	-.03180	.08700	-.36620
4.591	4.070	-.01000	.00150	.00390	.09260	.00010	-.00460	-.00690	-.00440	.08520	-.05270
4.591	5.320	-.02000	.03150	.00450	.08950	-.00040	-.00420	-.00660	.02370	.08470	.28060
4.591	6.580	-.02000	.06170	.00460	.08690	.00000	-.00400	-.00640	.05220	.08610	.60610
4.591	7.820	-.03000	.09280	.00530	.08490	.00040	-.00370	-.00630	.08140	.08930	.91110
4.591	9.070	-.04000	.12480	.00560	.08320	.00080	-.00360	-.00630	.11130	.09440	1.17900
4.591	10.330	-.05000	.15890	.00610	.08170	.00090	-.00340	-.00630	.14300	.10140	1.41050
4.591	11.580	-.06000	.19420	.00650	.08020	.00110	-.00320	-.00630	.17570	.11000	1.59620
4.591	12.840	-.07000	.23020	.00690	.07870	.00140	-.00300	-.00630	.20870	.12030	1.73400
4.591	14.100	-.08000	.26890	.00690	.07730	.00140	-.00280	-.00640	.24380	.13290	1.83380
4.591	15.380	-.08000	.30950	.00710	.07600	.00160	-.00250	-.00650	.28030	.14780	1.89630
4.591	16.650	-.09000	.35120	.00700	.07470	.00180	-.00210	-.00670	.31730	.16450	1.92860
4.591	17.920	-.10000	.39430	.00720	.07330	.00170	-.00180	-.00680	.35500	.18340	1.93550
4.591	19.210	-.11000	.43900	.00730	.07220	.00190	-.00150	-.00700	.39340	.20500	1.91880
4.591	20.490	-.12000	.48370	.00760	.07120	.00220	-.00140	-.00710	.43090	.22840	1.88630
4.591	21.770	-.13000	.53060	.00750	.07020	.00230	-.00130	-.00730	.46970	.25440	1.84610
4.591	23.060	-.13000	.57780	.00730	.06930	.00250	-.00110	-.00750	.50770	.28260	1.79650
4.591	24.350	-.14000	.62770	.00720	.06840	.00280	-.00100	-.00770	.54700	.31360	1.74400
4.591	25.630	-.15000	.67740	.00640	.06760	.00300	-.00090	-.00800	.58500	.34650	1.68810
4.591	26.930	-.16000	.72930	.00570	.06680	.00350	-.00090	-.00850	.62360	.38250	1.63030
4.591	28.200	-.16000	.78190	.00510	.06600	.00380	-.00080	-.00900	.66170	.42040	1.57380
4.591	29.460	-.17000	.83360	.00470	.06530	.00390	-.00070	-.00950	.69770	.45960	1.51790
4.591	30.660	-.18000	.88360	.00270	.06490	.00360	-.00050	-.01000	.73120	.49930	1.46440
4.591	31.570	-.18000	.92340	.00160	.06440	.00350	-.00030	-.01040	.75730	.53130	1.42520
4.591	32.060	-.18000	.94550	.00060	.06390	.00340	-.00010	-.01060	.77170	.54900	1.40550
	GRADIENT	-.00494	.02154	.00007	-.00253	-.00055	.00031	.00034	.02010	-.00258	.20905

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY042) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1049/ 0 RN/L = 17.38 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.190	.01000	-.07910	.00280	.10150	.00040	-.00540	-.00790	-.07940	.09320	-.85190
4.591	1.130	.00000	-.05930	.00280	.09920	.00000	-.00500	-.00760	-.06110	.08990	-.67990
4.591	2.070	.00000	-.03890	.00330	.09670	-.00020	-.00470	-.00740	-.04200	.08700	-.48340
4.591	3.040	.00000	-.01710	.00340	.09420	-.00050	-.00440	-.00710	-.02160	.08490	-.25530
4.591	4.030	-.01000	.00590	.00360	.09190	-.00050	-.00420	-.00690	.00000	.08370	.00100
4.591	5.010	-.01000	.02860	.00390	.08950	-.00060	-.00410	-.00670	.02140	.08330	.25750
4.591	6.010	-.02000	.05300	.00400	.08730	-.00070	-.00390	-.00650	.04450	.08390	.53050
4.591	7.030	-.03000	.07830	.00440	.08550	-.00080	-.00370	-.00640	.06830	.08590	.79570
4.591	8.050	-.03000	.10370	.00470	.08410	-.00040	-.00350	-.00630	.09210	.08920	1.03220
4.591	9.080	-.04000	.13120	.00500	.08280	-.00010	-.00340	-.00630	.11780	.09390	1.25420
4.591	10.120	-.05000	.15920	.00540	.08160	.00000	-.00340	-.00630	.14390	.09970	1.44190
4.591	11.170	-.06000	.18890	.00540	.08030	.00030	-.00320	-.00640	.17140	.10690	1.60300
4.591	12.240	-.06000	.21930	.00560	.07910	.00050	-.00310	-.00640	.19940	.11530	1.72800
4.591	13.290	-.07000	.25070	.00530	.07800	.00070	-.00290	-.00640	.22800	.12510	1.82220
4.591	14.360	-.08000	.28390	.00520	.07680	.00080	-.00270	-.00650	.25810	.13650	1.89080
4.591	15.460	-.08000	.31840	.00540	.07540	.00090	-.00240	-.00660	.28910	.14930	1.93650
4.591	16.580	-.09000	.35530	.00560	.07400	.00110	-.00210	-.00670	.32190	.16420	1.96050
4.591	17.670	-.10000	.39270	.00540	.07290	.00110	-.00190	-.00690	.35460	.18060	1.96320
4.591	18.780	-.11000	.43150	.00530	.07200	.00120	-.00170	-.00700	.38810	.19900	1.94930
4.591	19.890	-.11000	.47030	.00540	.07120	.00150	-.00150	-.00720	.42090	.21900	1.92210
4.591	21.040	-.12000	.51100	.00570	.07030	.00170	-.00140	-.00740	.45470	.24130	1.88460
4.591	22.160	-.13000	.55260	.00550	.06950	.00180	-.00130	-.00750	.48870	.26500	1.84390
4.591	23.290	-.13000	.59480	.00530	.06860	.00210	-.00110	-.00770	.52250	.29050	1.79840
4.591	24.460	-.14000	.64000	.00510	.06820	.00260	-.00110	-.00790	.55770	.31950	1.74560
4.591	25.620	-.15000	.68640	.00450	.06760	.00330	-.00110	-.00830	.59320	.35030	1.69320
4.591	26.800	-.15000	.73350	.00330	.06670	.00320	-.00090	-.00860	.62830	.38300	1.64020
4.591	27.960	-.16000	.78030	.00300	.06600	.00380	-.00080	-.00900	.66200	.41700	1.58770
4.591	29.110	-.17000	.82760	.00200	.06530	.00410	-.00070	-.00930	.69530	.45260	1.53600
4.591	30.410	-.18000	.88160	.00050	.06450	.00390	-.00040	-.00990	.73170	.49500	1.47800
4.591	31.710	-.18000	.93520	-.00050	.06400	.00380	-.00020	-.01040	.76620	.53910	1.42120
4.591	32.210	-.19000	.95320	-.00080	.06330	.00350	-.00020	-.01070	.77700	.55490	1.40010
	GRADIENT	-.00417	.02213	.00023	-.00252	-.00024	.00031	.00026	.02068	-.00250	.22232

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY043) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6900 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 48/ 0 RN/L = 17.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.410	.01000	-.07820	.00240	.10220	.00140	-.00550	-.00790	-.07890	.09450	-.83500
4.591	1.790	.00000	-.04870	.00300	.09770	.00110	-.00490	-.00740	-.05150	.08890	-.57980
4.591	2.930	.00000	-.02170	.00410	.09450	.00170	-.00450	-.00710	-.02610	.08590	-.30450
4.591	3.950	-.01000	.00200	.00380	.09130	.00060	-.00420	-.00680	-.00370	.08390	-.04510
4.591	5.010	-.01000	.02740	.00390	.08870	-.00020	-.00400	-.00660	.02020	.08330	.24260
4.591	6.070	-.02000	.05260	.00420	.08650	-.00050	-.00370	-.00650	.04400	.08410	.52310
4.591	7.120	-.03000	.07850	.00460	.08500	-.00060	-.00380	-.00630	.06830	.08650	.78980
4.591	8.200	-.04000	.10560	.00500	.08350	.00010	-.00340	-.00630	.09370	.09020	1.03930
4.591	9.260	-.04000	.13300	.00560	.08190	.00020	-.00340	-.00630	.11940	.09450	1.26240
4.591	10.330	-.05000	.16170	.00590	.08070	.00020	-.00340	-.00630	.14600	.10070	1.45060
4.591	11.400	-.06000	.19170	.00620	.07960	.00080	-.00320	-.00630	.17380	.10810	1.60750
4.591	12.470	-.06000	.22270	.00620	.07840	.00110	-.00310	-.00640	.20220	.11680	1.73080
4.591	13.530	-.07000	.25430	.00630	.07710	.00120	-.00290	-.00640	.23110	.12660	1.82520
4.591	14.610	-.08000	.28730	.00630	.07590	.00120	-.00260	-.00650	.26100	.13800	1.89130
4.591	15.680	-.09000	.32030	.00650	.07460	.00110	-.00240	-.00670	.29050	.15040	1.93070
4.591	16.770	-.09000	.35590	.00650	.07340	.00140	-.00210	-.00680	.32200	.16490	1.95200
4.591	17.840	-.10000	.39140	.00650	.07220	.00140	-.00190	-.00690	.35300	.18070	1.95390
4.591	18.920	-.11000	.42790	.00660	.07130	.00150	-.00170	-.00710	.38430	.19820	1.93840
4.591	19.990	-.11000	.46480	.00680	.07050	.00170	-.00160	-.00730	.41560	.21720	1.91290
4.591	21.070	-.12000	.50310	.00700	.06960	.00200	-.00160	-.00750	.44740	.23790	1.88030
4.591	22.150	-.13000	.54240	.00700	.06890	.00210	-.00150	-.00760	.47960	.26050	1.84110
4.591	23.220	-.13000	.58170	.00690	.06810	.00240	-.00130	-.00780	.51110	.28410	1.79870
4.591	24.300	-.14000	.62210	.00700	.06740	.00260	-.00110	-.00800	.54270	.30970	1.75230
4.591	25.380	-.15000	.66390	.00690	.06690	.00310	-.00100	-.00820	.57480	.33730	1.70390
4.591	26.440	-.15000	.70510	.00590	.06630	.00320	-.00100	-.00860	.60560	.36570	1.65560
4.591	27.510	-.16000	.74720	.00540	.06570	.00360	-.00100	-.00910	.63630	.39580	1.60730
4.591	28.570	-.16000	.79000	.00450	.06510	.00400	-.00090	-.00940	.66670	.42750	1.55940
4.591	29.620	-.17000	.83280	.00360	.06430	.00420	-.00080	-.00980	.69630	.46020	1.51310
4.591	30.650	-.18000	.87480	.00290	.06360	.00380	-.00050	-.01030	.72440	.49340	1.46790
4.591	31.660	-.18000	.91640	.00180	.06290	.00380	-.00030	-.01080	.75140	.52750	1.42430
4.591	32.510	-.19000	.95300	.00070	.06250	.00410	-.00030	-.01100	.77450	.55790	1.38800
	GRADIENT	-.00509	.02272	.00046	-.00306	-.00014	.00037	.00031	.02131	-.00299	.22376

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY044) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 5.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1048/ 0 RN/L = 18.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.840	.02000	-.10030	.00320	.10400	.00110	-.00580	-.00840	-.09880	.09730	-1.01590
4.591	.150	.01000	-.07890	.00290	.10080	.00040	-.00530	-.00790	-.07920	.09230	-.85780
4.591	1.240	.00000	-.05510	.00270	.09790	.00000	-.00490	-.00750	-.05700	.08840	-.64520
4.591	2.320	.00000	-.03190	.00280	.09520	-.00020	-.00460	-.00730	-.03540	.08550	-.41410
4.591	3.430	.00000	-.00680	.00310	.09230	-.00040	-.00440	-.00700	-.01180	.08340	-.14190
4.591	4.570	-.01000	.01940	.00340	.08950	-.00070	-.00410	-.00670	.01290	.08230	.15680
4.591	5.760	-.02000	.04810	.00350	.08680	-.00070	-.00390	-.00650	.03990	.08270	.48310
4.591	6.970	-.03000	.07750	.00380	.08470	-.00070	-.00360	-.00640	.06760	.08500	.79580
4.591	8.190	-.04000	.10860	.00450	.08290	-.00040	-.00340	-.00630	.09690	.08910	1.08820
4.591	9.420	-.04000	.14080	.00480	.08140	.00000	-.00330	-.00630	.12690	.09490	1.33700
4.591	10.660	-.05000	.17410	.00510	.07990	.00020	-.00320	-.00630	.15790	.10240	1.54190
4.591	11.910	-.06000	.20930	.00520	.07860	.00050	-.00310	-.00640	.19090	.11190	1.70620
4.591	13.170	-.07000	.24640	.00500	.07720	.00070	-.00290	-.00640	.22430	.12300	1.82310
4.591	14.430	-.08000	.28540	.00500	.07570	.00080	-.00270	-.00650	.25960	.13620	1.90510
4.591	15.700	-.09000	.32580	.00490	.07420	.00080	-.00240	-.00670	.29580	.15150	1.95290
4.591	16.990	-.09000	.36790	.00490	.07280	.00090	-.00210	-.00690	.33300	.16910	1.96890
4.591	18.280	-.10000	.41080	.00480	.07160	.00110	-.00180	-.00700	.37020	.18880	1.96020
4.591	19.570	-.11000	.45510	.00510	.07060	.00130	-.00170	-.00720	.40800	.21110	1.93270
4.591	20.880	-.12000	.50190	.00500	.06960	.00160	-.00160	-.00740	.44710	.23610	1.89360
4.591	22.200	-.13000	.54980	.00490	.06860	.00190	-.00150	-.00760	.48630	.26350	1.84480
4.591	23.540	-.14000	.59940	.00490	.06770	.00240	-.00130	-.00790	.52580	.29390	1.78860
4.591	24.890	-.14000	.65060	.00500	.06700	.00310	-.00120	-.00810	.56540	.32710	1.72830
4.591	26.240	-.15000	.70400	.00430	.06640	.00350	-.00110	-.00860	.60570	.36350	1.66600
4.591	27.600	-.16000	.75890	.00320	.06550	.00380	-.00090	-.00910	.64590	.40250	1.60450
4.591	28.980	-.17000	.81430	.00240	.06470	.00420	-.00080	-.00960	.68480	.44400	1.54220
4.591	30.300	-.18000	.86800	.00160	.06410	.00420	-.00050	-.01010	.72110	.48640	1.48250
4.591	31.440	-.18000	.91320	.00100	.06350	.00410	-.00030	-.01060	.75020	.52360	1.43260
4.591	32.210	-.19000	.94380	.00060	.06310	.00430	-.00030	-.01090	.76920	.54960	1.39950
4.591	32.480	-.19000	.95390	-.00010	.06230	.00450	-.00020	-.01090	.77560	.55790	1.39000
4.591	32.700	-.19000	.96320	.00000	.06240	.00410	-.00030	-.01110	.78120	.56590	1.38050
	GRADIENT	-.00472	.02208	.00005	-.00265	-.00030	.00030	.00030	.02061	-.00274	.21744

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (RHY045) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 66/ 0 RN/L = 14.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.710	.01000	-.10370	.00310	.10580	.00110	-.00540	-.00880	-.10250	.10010	-1.02340
4.591	-.100	.01000	-.09040	.00400	.10350	.00090	-.00520	-.00850	-.09020	.09660	-.93380
4.591	.980	.00000	-.06830	.00390	.10050	.00020	-.00490	-.00790	-.06990	.09210	-.75910
4.591	2.240	.00000	-.04160	.00370	.09730	.00000	-.00430	-.00740	-.04510	.08840	-.51080
4.591	3.500	-.01000	-.01320	.00440	.09390	-.00020	-.00390	-.00710	-.01850	.08560	-.21640
4.591	4.740	-.01000	.01640	.00500	.09070	-.00080	-.00370	-.00670	.00950	.08440	.11250
4.591	5.990	-.02000	.04590	.00550	.08780	-.00120	-.00370	-.00630	.03730	.08470	.44010
4.591	7.230	-.03000	.07670	.00580	.08540	-.00150	-.00360	-.00610	.06620	.08700	.76160
4.591	8.480	-.04000	.10770	.00660	.08380	-.00140	-.00350	-.00610	.09520	.09130	1.04320
4.591	9.730	-.04000	.14040	.00700	.08230	-.00130	-.00340	-.00620	.12570	.09750	1.29120
4.591	10.980	-.05000	.17420	.00750	.08070	-.00090	-.00330	-.00620	.15710	.10480	1.49840
4.591	12.240	-.06000	.21010	.00800	.07910	-.00070	-.00290	-.00630	.19020	.11430	1.66440
4.591	13.510	-.07000	.24740	.00800	.07770	-.00070	-.00260	-.00630	.22420	.12560	1.78410
4.591	14.770	-.08000	.28670	.00820	.07650	-.00070	-.00220	-.00630	.25970	.13940	1.86240
4.591	16.050	-.09000	.32760	.00850	.07530	-.00060	-.00180	-.00650	.29620	.15520	1.90860
4.591	17.330	-.10000	.36990	.00900	.07390	-.00050	-.00140	-.00660	.33350	.17300	1.92730
4.591	18.610	-.10000	.41410	.00950	.07290	-.00050	-.00120	-.00680	.37180	.19350	1.92140
4.591	19.880	-.11000	.45860	.00940	.07160	-.00020	-.00090	-.00700	.40970	.21560	1.89960
4.591	21.170	-.12000	.50420	.00950	.07070	-.00020	-.00070	-.00720	.44760	.24030	1.86230
4.591	22.460	-.13000	.55120	.00970	.06970	-.00010	-.00070	-.00740	.48590	.26730	1.81780
4.591	23.740	-.14000	.59960	.00970	.06870	.00000	-.00070	-.00760	.52450	.29670	1.76760
4.591	25.030	-.14000	.64890	.00930	.06790	.00000	-.00060	-.00790	.56270	.32860	1.71240
4.591	26.320	-.15000	.69980	.00890	.06730	.00000	-.00050	-.00820	.60120	.36310	1.65570
4.591	27.590	-.16000	.75090	.00790	.06640	-.00020	-.00030	-.00870	.63860	.39920	1.59960
4.591	28.870	-.17000	.80300	.00710	.06570	-.00020	-.00010	-.00920	.67550	.43790	1.54240
4.591	30.130	-.17000	.85460	.00640	.06500	-.00030	.00000	-.00960	.71070	.47790	1.48700
4.591	31.200	-.18000	.90030	.00510	.06450	-.00060	.00000	-.01010	.74090	.51450	1.44010
4.591	31.890	-.18000	.93060	.00390	.06390	-.00070	.00010	-.01050	.76070	.53880	1.41170
4.591	32.190	-.18000	.94410	.00310	.06340	-.00070	.00020	-.01060	.76950	.54960	1.40010
	GRADIENT	-.00406	.02188	.00026	-.00272	-.00033	.00033	.00038	.02038	-.00287	.20713

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY046) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = .000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1066/ 0 RN/L = 16.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.660	.02000	-.10100	.00380	.10430	.00010	-.00560	-.00840	-.09980	.09750	-1.02420
4.591	.170	.01000	-.08230	.00380	.10180	-.00040	-.00520	-.00800	-.08260	.09350	-.88350
4.591	1.070	.00000	-.06310	.00360	.09950	-.00070	-.00490	-.00770	-.06480	.09010	-.71950
4.591	2.010	.00000	-.04310	.00380	.09700	-.00100	-.00460	-.00750	-.04620	.08710	-.53010
4.591	2.980	.00000	-.02120	.00390	.09460	-.00120	-.00440	-.00710	-.02570	.08490	-.30270
4.591	3.950	-.01000	.00120	.00410	.09210	-.00150	-.00420	-.00680	-.00440	.08350	-.05350
4.591	4.920	-.01000	.02410	.00470	.08970	-.00150	-.00400	-.00660	.01700	.08290	.20550
4.591	5.920	-.02000	.04810	.00500	.08760	-.00170	-.00380	-.00640	.03970	.08350	.47560
4.591	6.920	-.03000	.07220	.00560	.08580	-.00180	-.00370	-.00630	.06240	.08530	.73180
4.591	7.950	-.03000	.09800	.00600	.08450	-.00140	-.00360	-.00630	.08660	.08860	.97750
4.591	8.970	-.04000	.12480	.00640	.08330	-.00120	-.00350	-.00630	.11160	.09310	1.19880
4.591	10.010	-.05000	.15280	.00670	.08190	-.00110	-.00330	-.00620	.13780	.09850	1.39820
4.591	11.060	-.05000	.18170	.00700	.08060	-.00080	-.00310	-.00620	.16450	.10530	1.56190
4.591	12.100	-.06000	.21240	.00710	.07940	-.00060	-.00300	-.00630	.19280	.11350	1.69800
4.591	13.180	-.07000	.24390	.00710	.07820	-.00050	-.00270	-.00630	.22160	.12320	1.79890
4.591	14.260	-.08000	.27710	.00730	.07700	-.00060	-.00250	-.00630	.25170	.13440	1.87210
4.591	15.340	-.08000	.31130	.00760	.07580	-.00060	-.00210	-.00650	.28240	.14700	1.92020
4.591	16.440	-.09000	.34680	.00770	.07450	-.00050	-.00180	-.00660	.31400	.16130	1.94690
4.591	17.540	-.10000	.38420	.00810	.07330	-.00060	-.00150	-.00670	.34680	.17750	1.95390
4.591	18.650	-.10000	.42280	.00840	.07230	-.00060	-.00130	-.00680	.38020	.19560	1.94330
4.591	19.770	-.11000	.46140	.00850	.07130	-.00050	-.00110	-.00700	.41300	.21520	1.91910
4.591	20.890	-.12000	.50210	.00870	.07040	-.00050	-.00100	-.00720	.44700	.23690	1.88630
4.591	22.020	-.13000	.54250	.00870	.06950	-.00040	-.00090	-.00740	.48000	.26000	1.84590
4.591	23.170	-.13000	.58570	.00880	.06870	-.00020	-.00080	-.00750	.51470	.28600	1.79950
4.591	24.320	-.14000	.62980	.00850	.06800	-.00010	-.00070	-.00780	.54940	.31380	1.75070
4.591	25.480	-.15000	.67490	.00800	.06730	.00010	-.00060	-.00800	.58380	.34360	1.69910
4.591	26.660	-.15000	.72110	.00730	.06660	-.00020	-.00040	-.00840	.61830	.37560	1.64580
4.591	27.830	-.16000	.76940	.00650	.06600	-.00020	-.00030	-.00880	.65340	.41020	1.59280
4.591	28.960	-.17000	.81510	.00540	.06520	-.00010	-.00020	-.00910	.68550	.44460	1.54190
4.591	30.240	-.17000	.86770	.00410	.06450	-.00010	.00000	-.00960	.72130	.48560	1.48530
4.591	31.590	-.18000	.92310	.00280	.06380	-.00040	.00020	-.01030	.75710	.53090	1.42600
4.591	32.230	-.18000	.94830	.00210	.06360	-.00090	.00020	-.01060	.77260	.55260	1.39800
	GRADIENT	-.00492	.02230	.00014	-.00260	-.00028	.00028	.00032	.02084	-.00262	.22044

C.4

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY047) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 65/ 0 RN/L = 15.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.850	.02000	-.10510	.00360	.10500	.00130	-.00580	-.00850	-.10360	.09920	-1.04400
4.591	.500	.01000	-.07770	.00410	.10140	.00140	-.00540	-.00810	-.07860	.09330	-.84180
4.591	1.650	.00000	-.05360	.00340	.09860	.00110	-.00480	-.00750	-.05620	.08950	-.62770
4.591	2.670	.00000	-.02980	.00380	.09590	.00100	-.00450	-.00720	-.03390	.08680	-.39080
4.591	3.720	-.01000	-.00580	.00450	.09310	.00060	-.00430	-.00690	-.01140	.08500	-.13430
4.591	4.780	-.01000	.01910	.00450	.09040	-.00010	-.00410	-.00660	.01210	.08410	.14410
4.591	5.840	-.02000	.04440	.00480	.08800	-.00020	-.00390	-.00640	.03600	.08430	.42700
4.591	6.900	-.03000	.07030	.00520	.08600	-.00050	-.00380	-.00630	.06040	.08610	.70130
4.591	7.970	-.03000	.09730	.00570	.08450	-.00040	-.00380	-.00620	.08570	.08930	.95920
4.591	9.040	-.04000	.12480	.00620	.08310	-.00010	-.00360	-.00630	.11150	.09380	1.18800
4.591	10.110	-.05000	.15300	.00660	.08180	.00000	-.00340	-.00620	.13770	.09940	1.38480
4.591	11.190	-.06000	.18330	.00670	.08050	.00030	-.00320	-.00630	.16580	.10650	1.55610
4.591	12.250	-.06000	.21380	.00690	.07930	.00050	-.00300	-.00630	.19380	.11480	1.68850
4.591	13.330	-.07000	.24610	.00690	.07810	.00080	-.00280	-.00630	.22340	.12460	1.79290
4.591	14.390	-.08000	.27870	.00720	.07680	.00060	-.00260	-.00630	.25300	.13550	1.86720
4.591	15.470	-.08000	.31280	.00770	.07560	.00060	-.00220	-.00650	.28360	.14810	1.91470
4.591	16.550	-.09000	.34840	.00800	.07430	.00050	-.00180	-.00660	.31520	.16230	1.94210
4.591	17.630	-.10000	.38440	.00790	.07310	.00050	-.00150	-.00670	.34680	.17790	1.94890
4.591	18.710	-.11000	.42160	.00810	.07210	.00030	-.00130	-.00690	.37890	.19540	1.93920
4.591	19.790	-.11000	.45950	.00840	.07130	.00020	-.00120	-.00700	.41120	.21450	1.91620
4.591	20.870	-.12000	.49780	.00870	.07050	.00020	-.00100	-.00720	.44310	.23520	1.88390
4.591	21.950	-.13000	.53640	.00890	.06970	.00020	-.00090	-.00740	.47470	.25700	1.84640
4.591	23.030	-.13000	.57640	.00890	.06890	.00040	-.00090	-.00760	.50690	.28090	1.80410
4.591	24.110	-.14000	.61750	.00890	.06820	.00050	-.00080	-.00780	.53930	.30650	1.75930
4.591	25.190	-.14000	.65960	.00840	.06750	.00060	-.00080	-.00810	.57180	.33400	1.71210
4.591	26.250	-.15000	.70090	.00760	.06670	.00030	-.00070	-.00840	.60290	.36210	1.66490
4.591	27.330	-.16000	.74460	.00700	.06610	.00010	-.00050	-.00870	.63500	.39300	1.61580
4.591	28.390	-.16000	.78750	.00620	.06550	.00010	-.00040	-.00910	.66570	.42450	1.56800
4.591	29.430	-.17000	.83050	.00540	.06480	.00040	-.00040	-.00950	.69560	.45720	1.52160
4.591	30.480	-.17000	.87410	.00430	.06410	.00000	-.00010	-.00990	.72510	.49140	1.47550
4.591	31.510	-.18000	.91660	.00310	.06330	-.00030	.00000	-.01040	.75270	.52580	1.43140
4.591	32.400	-.18000	.95490	.00210	.06300	-.00020	.00010	-.01080	.77700	.55770	1.39320
	GRADIENT	-.00545	.02213	.00015	-.00259	-.00024	.00031	.00035	.02063	-.00268	.21267

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY048) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPOBRK = 55.000 BDFLAP = .000
LWGRIT = .000 RWGRIT = .000
A-RATE = 5.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1065/ 0 RN/L = 16.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.950	.02000	-.10670	.00370	.10530	.00060	-.00590	-.00870	-.10500	.09880	-1.06330
4.591	-.450	.01000	-.09580	.00360	.10360	.00030	-.00560	-.00840	-.09500	.09600	-.99030
4.591	.410	.01000	-.07620	.00290	.10090	-.00010	-.00530	-.00800	-.07690	.09190	-.83630
4.591	1.430	.00000	-.05380	.00310	.09820	-.00050	-.00490	-.00770	-.05610	.08830	-.63490
4.591	2.480	.00000	-.03100	.00350	.09550	-.00080	-.00460	-.00730	-.03480	.08560	-.40660
4.591	3.570	.00000	-.00600	.00400	.09280	-.00100	-.00440	-.00700	-.01120	.08360	-.13480
4.591	4.680	-.01000	.02050	.00420	.09010	-.00130	-.00420	-.00670	.01380	.08290	.16660
4.591	5.860	-.02000	.04830	.00450	.08760	-.00140	-.00400	-.00650	.04000	.08350	.47900
4.591	7.060	-.03000	.07810	.00500	.08560	-.00140	-.00380	-.00640	.06800	.08590	.79210
4.591	8.270	-.03000	.10850	.00540	.08400	-.00110	-.00370	-.00630	.09650	.09010	1.07170
4.591	9.490	-.04000	.14130	.00570	.08240	-.00090	-.00360	-.00630	.12720	.09590	1.32660
4.591	10.730	-.05000	.17520	.00610	.08080	-.00050	-.00340	-.00630	.15870	.10340	1.53400
4.591	11.960	-.06000	.21040	.00620	.07940	-.00030	-.00310	-.00630	.19120	.11280	1.69450
4.591	13.220	-.07000	.24760	.00610	.07790	-.00010	-.00280	-.00630	.22520	.12400	1.81500
4.591	14.490	-.08000	.28720	.00660	.07650	-.00010	-.00250	-.00640	.26100	.13760	1.89700
4.591	15.770	-.09000	.32790	.00680	.07500	-.00010	-.00200	-.00660	.29760	.15300	1.94470
4.591	17.060	-.09000	.37100	.00690	.07350	-.00010	-.00170	-.00670	.33560	.17100	1.96250
4.591	18.350	-.10000	.41540	.00700	.07230	-.00030	-.00140	-.00690	.37420	.19140	1.95500
4.591	19.650	-.11000	.46070	.00720	.07130	-.00030	-.00120	-.00710	.41270	.21400	1.92840
4.591	20.950	-.12000	.50660	.00750	.07020	-.00020	-.00100	-.00730	.45100	.23880	1.88810
4.591	22.290	-.13000	.55660	.00770	.06920	-.00010	-.00090	-.00750	.49190	.26740	1.83950
4.591	23.640	-.13000	.60770	.00740	.06820	.00000	-.00090	-.00770	.53270	.29850	1.78440
4.591	24.990	-.14000	.65950	.00660	.06740	.00020	-.00080	-.00810	.57280	.33210	1.72500
4.591	26.350	-.15000	.71390	.00590	.06660	.00030	-.00060	-.00850	.61380	.36910	1.66290
4.591	27.710	-.16000	.76860	.00490	.06580	.00020	-.00050	-.00890	.65370	.40820	1.60120
4.591	29.060	-.17000	.82350	.00410	.06500	.00030	-.00030	-.00940	.69230	.44960	1.53960
4.591	30.380	-.17000	.87750	.00310	.06440	.00010	-.00010	-.00990	.72870	.49210	1.48050
4.591	31.460	-.18000	.92160	.00250	.06370	.00000	.00000	-.01040	.75710	.52830	1.43310
4.591	32.210	-.18000	.95190	.00190	.06340	.00000	.00010	-.01070	.77590	.55410	1.40040
4.591	32.700	-.19000	.97020	.00150	.06270	-.00040	.00010	-.01090	.78710	.56990	1.38100
	GRADIENT	-.00434	.02247	.00012	-.00268	-.00033	.00030	.00035	.02099	-.00286	.21747

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY049) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 39/ 0 RN/L = 16.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.530	.00000	-.10380	.02000	.11340	-.00330	-.00010	.00060	-.10480	.10730	-.97610
4.591	1.740	.00000	-.07630	.01910	.10970	-.00300	.00000	.00050	-.07940	.10220	-.77770
4.591	2.720	-.01000	-.05270	.01860	.10620	-.00290	.00000	.00060	-.05750	.09820	-.58540
4.591	3.620	-.02000	-.03150	.01840	.10340	-.00310	.00000	.00050	-.03770	.09560	-.39410
4.591	4.560	-.02000	-.00930	.01830	.10050	-.00270	-.00020	.00050	-.01680	.09380	-.17940
4.591	5.500	-.03000	.01360	.01810	.09770	-.00260	-.00030	.00050	.00470	.09280	.05130
4.591	6.440	-.03000	.03700	.01810	.09540	-.00240	-.00030	.00050	.02670	.09300	.28710
4.591	7.370	-.04000	.06060	.01850	.09350	-.00240	-.00020	.00050	.04890	.09440	.51780
4.591	8.310	-.05000	.08470	.01910	.09190	-.00200	-.00020	.00050	.07150	.09700	.73650
4.591	9.250	-.05000	.10930	.01980	.09050	-.00170	-.00020	.00040	.09440	.10060	.93820
4.591	10.200	-.06000	.13440	.02020	.08910	-.00160	-.00020	.00040	.11770	.10510	1.11970
4.591	11.140	-.06000	.16070	.02070	.08770	-.00140	-.00020	.00030	.14200	.11060	1.28410
4.591	12.080	-.07000	.18800	.02120	.08640	-.00120	-.00030	.00020	.16720	.11720	1.42670
4.591	13.030	-.07000	.21540	.02150	.08500	-.00090	-.00030	.00020	.19220	.12460	1.54210
4.591	13.990	-.08000	.24310	.02190	.08350	-.00050	-.00020	.00020	.21740	.13300	1.63470
4.591	14.940	-.09000	.27260	.02240	.08210	-.00010	-.00020	.00020	.24400	.14260	1.71050
4.591	15.890	-.09000	.30230	.02310	.08070	.00020	-.00010	.00020	.27070	.15340	1.76460
4.591	16.840	-.10000	.33290	.02380	.07930	.00040	.00000	.00010	.29770	.16530	1.80040
4.591	17.790	-.11000	.36510	.02410	.07810	.00070	.00000	.00010	.32600	.17880	1.82290
4.591	18.750	-.11000	.39850	.02490	.07700	.00110	.00000	.00010	.35500	.19390	1.83080
4.591	19.700	-.12000	.43060	.02550	.07600	.00170	.00000	.00010	.38230	.20960	1.82360
4.591	20.650	-.12000	.46410	.02630	.07510	.00230	.00000	.00010	.41040	.22690	1.80880
4.591	21.600	-.13000	.49710	.02710	.07430	.00260	.00000	.00010	.43760	.24500	1.78640
4.591	22.560	-.13000	.53190	.02790	.07340	.00310	.00000	.00020	.46600	.26470	1.75990
4.591	23.500	-.14000	.56570	.02820	.07250	.00340	-.00010	.00030	.49290	.28500	1.72940
4.591	24.460	-.14000	.60190	.02890	.07170	.00410	-.00020	.00040	.52140	.30740	1.69590
4.591	25.400	-.15000	.63680	.02920	.07100	.00450	-.00030	.00050	.54810	.33020	1.65990
4.591	26.340	-.16000	.67310	.02940	.07020	.00480	-.00040	.00050	.57550	.35460	1.62260
4.591	27.280	-.16000	.70980	.02950	.06970	.00510	-.00040	.00040	.60250	.38040	1.58380
4.591	28.210	-.17000	.74630	.02990	.06910	.00570	-.00050	.00040	.62870	.40680	1.54520
4.591	29.140	-.17000	.78300	.03010	.06840	.00640	-.00060	.00050	.65440	.43410	1.50730
4.591	30.060	-.18000	.82020	.03060	.06760	.00660	-.00060	.00050	.67990	.46260	1.46970
4.591	30.970	-.18000	.85620	.03080	.06700	.00640	-.00040	.00040	.70370	.49120	1.43250
4.591	31.840	-.19000	.89150	.03040	.06640	.00650	-.00020	.00030	.72640	.52000	1.39680
4.591	32.550	-.19000	.92110	.03020	.06610	.00670	-.00020	.00030	.74510	.54470	1.36790
	GRADIENT	-.00596	.02351	-.00042	-.00323	.00011	-.00002	-.00002	.02189	-.00340	.19813

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY050) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = -40.000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 2.000 A-SCHD = 1.000
PHI = .000

RUN NO. 40/ 0 RN/L = 15.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.700	.00000	-.09970	.01870	.11280	-.00390	.00020	.00070	-.10100	.10810	-.93460
4.591	2.170	-.01000	-.06690	.01850	.10820	-.00320	.00000	.00060	-.07060	.10170	-.69600
4.591	3.540	-.02000	-.03430	.01810	.10380	-.00320	-.00010	.00050	-.04040	.09730	-.41520
4.591	4.800	-.02000	-.00340	.01820	.09990	-.00300	-.00010	.00040	-.01130	.09480	-.12010
4.591	6.090	-.03000	.02850	.01840	.09640	-.00280	-.00020	.00050	.01860	.09420	.19770
4.591	7.390	-.04000	.06130	.01870	.09360	-.00260	-.00010	.00050	.04940	.09580	.51610
4.591	8.690	-.05000	.09450	.01910	.09140	-.00200	-.00020	.00050	.08030	.09940	.80800
4.591	9.990	-.06000	.12870	.01990	.08940	-.00160	-.00020	.00040	.11220	.10500	1.06830
4.591	11.290	-.06000	.16490	.02070	.08750	-.00140	-.00020	.00030	.14570	.11250	1.29430
4.591	12.600	-.07000	.20230	.02120	.08560	-.00100	-.00020	.00030	.18000	.12190	1.47590
4.591	13.910	-.08000	.24130	.02180	.08360	-.00050	-.00020	.00020	.21550	.13320	1.61740
4.591	15.230	-.09000	.28240	.02230	.08160	-.00010	-.00020	.00020	.25270	.14690	1.72020
4.591	16.550	-.10000	.32420	.02320	.07980	.00040	.00000	.00010	.28990	.16260	1.78220
4.591	17.860	-.11000	.36690	.02440	.07800	.00090	.00010	.00010	.32730	.18050	1.81320
4.591	19.190	-.11000	.41260	.02510	.07650	.00150	.00010	.00010	.36670	.20170	1.81780
4.591	20.510	-.12000	.45860	.02650	.07530	.00220	.00000	.00010	.40570	.22490	1.80340
4.591	21.830	-.13000	.50590	.02710	.07400	.00270	.00000	.00020	.44460	.25050	1.77500
4.591	23.150	-.14000	.55300	.02820	.07280	.00330	-.00010	.00030	.48250	.27800	1.73570
4.591	24.480	-.14000	.60160	.02910	.07170	.00410	-.00020	.00050	.52070	.30800	1.69040
4.591	25.790	-.15000	.65160	.02980	.07070	.00470	-.00030	.00060	.55900	.34070	1.64070
4.591	27.110	-.16000	.70200	.03030	.06990	.00510	-.00040	.00050	.59630	.37570	1.58720
4.591	28.420	-.17000	.75330	.03090	.06910	.00580	-.00050	.00050	.63310	.41290	1.53310
4.591	29.710	-.17000	.80400	.03120	.06800	.00660	-.00060	.00060	.66820	.45120	1.48090
4.591	31.000	-.18000	.85540	.03140	.06690	.00650	-.00030	.00050	.70260	.49160	1.42900
4.591	32.200	-.19000	.90480	.03140	.06620	.00670	-.00020	.00040	.73420	.53200	1.38010
4.591	32.760	-.19000	.93020	.03110	.06590	.00670	-.00010	.00050	.75060	.55260	1.35830
	GRADIENT	-.00517	.02350	-.00014	-.00315	.00020	-.00007	-.00007	.02189	-.00326	.19874

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY051) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1040/ 0 RN/L = 16.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.170	.00000	-.11080	.01920	.11470	-.00420	.00000	.00080	-.11120	.10650	-1.04380
4.591	.950	.00000	-.09160	.01850	.11190	-.00420	.00010	.00070	-.09330	.10250	-.91040
4.591	2.080	-.01000	-.06600	.01810	.10810	-.00380	.00000	.00050	-.06960	.09770	-.71310
4.591	3.260	-.01000	-.03820	.01790	.10420	-.00360	-.00010	.00050	-.04360	.09390	-.46440
4.591	4.420	-.02000	-.01010	.01800	.10060	-.00340	-.00020	.00050	-.01720	.09140	-.18870
4.591	5.620	-.03000	.01930	.01810	.09730	-.00330	-.00030	.00050	.01050	.09060	.11640
4.591	6.850	-.04000	.05060	.01820	.09490	-.00330	-.00020	.00050	.03990	.09170	.43530
4.591	8.090	-.04000	.08160	.01810	.09220	-.00270	-.00020	.00050	.06890	.09470	.72790
4.591	9.350	-.05000	.11440	.01910	.09030	-.00210	-.00030	.00040	.09950	.09960	.99930
4.591	10.610	-.06000	.14920	.02010	.08840	-.00200	-.00030	.00030	.13190	.10630	1.24090
4.591	11.890	-.07000	.18500	.02060	.08650	-.00160	-.00030	.00020	.16490	.11480	1.43610
4.591	13.190	-.08000	.22270	.02110	.08460	-.00110	-.00030	.00020	.19940	.12530	1.59160
4.591	14.500	-.08000	.26220	.02170	.08250	-.00060	-.00030	.00020	.23520	.13770	1.70790
4.591	15.810	-.09000	.30380	.02230	.08060	-.00020	-.00010	.00010	.27250	.15260	1.78590
4.591	17.160	-.10000	.34730	.02330	.07870	.00030	.00000	.00010	.31100	.17000	1.82980
4.591	18.500	-.11000	.39320	.02410	.07720	.00090	.00010	.00010	.35090	.19040	1.84220
4.591	19.860	-.12000	.44020	.02520	.07580	.00170	.00000	.00010	.39090	.21350	1.83060
4.591	21.240	-.13000	.48880	.02610	.07440	.00230	.00000	.00010	.43140	.23920	1.80370
4.591	22.610	-.13000	.53950	.02700	.07310	.00290	-.00010	.00030	.47200	.26740	1.76530
4.591	24.000	-.14000	.59220	.02820	.07200	.00390	-.00030	.00040	.51210	.29840	1.71590
4.591	25.420	-.15000	.64270	.02900	.07110	.00490	-.00050	.00050	.55310	.33330	1.65960
4.591	26.860	-.16000	.69770	.02950	.07010	.00530	-.00050	.00050	.59410	.37110	1.60100
4.591	28.180	-.17000	.74890	.02970	.06920	.00600	-.00050	.00050	.63090	.40800	1.54620
4.591	29.650	-.17000	.80930	.02980	.06780	.00670	-.00050	.00060	.67260	.45230	1.48670
4.591	31.490	-.18000	.88210	.03040	.06690	.00690	-.00020	.00060	.72110	.51150	1.40970
4.591	32.580	-.19000	.92380	.03060	.06600	.00710	-.00010	.00050	.74680	.54680	1.36590
	GRADIENT	-.00466	.02357	-.00027	-.00332	.00020	-.00006	-.00007	.02199	-.00356	.20019

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (RHY052) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 417 0 RN/L = 15.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.400	.00000	-.10490	.01890	.11380	-.00380	.00000	.00070	-.10560	.10590	-.99750
4.591	.730	.00000	-.09890	.01850	.11300	-.00380	.00010	.00070	-.10030	.10450	-.95980
4.591	1.620	.00000	-.07970	.01850	.11010	-.00330	.00010	.00060	-.08250	.10050	-.82120
4.591	2.830	-.01000	-.05190	.01860	.10620	-.00310	.00000	.00060	-.05680	.09630	-.58990
4.591	4.110	-.02000	-.02160	.01880	.10220	-.00270	-.00010	.00060	-.02840	.09310	-.30480
4.591	5.360	-.03000	.00910	.01890	.09860	-.00230	-.00020	.00060	.00050	.09170	.00630
4.591	6.610	-.03000	.04020	.01910	.09550	-.00220	-.00020	.00050	.02980	.09210	.32340
4.591	7.860	-.04000	.07180	.01920	.09300	-.00190	-.00020	.00050	.05940	.09450	.62820
4.591	9.110	-.05000	.10430	.01990	.09090	-.00150	-.00020	.00050	.08970	.09890	.90770
4.591	10.350	-.06000	.13750	.02060	.08900	-.00120	-.00020	.00040	.12060	.10480	1.15110
4.591	11.610	-.07000	.17250	.02130	.08710	-.00100	-.00020	.00030	.15300	.11250	1.35970
4.591	12.870	-.07000	.20950	.02170	.08520	-.00060	-.00030	.00030	.18700	.12220	1.52960
4.591	14.150	-.08000	.24710	.02220	.08330	-.00020	-.00020	.00030	.22120	.13350	1.65580
4.591	15.420	-.09000	.28690	.02280	.08140	.00030	-.00010	.00020	.25700	.14720	1.74580
4.591	16.700	-.10000	.32810	.02370	.07970	.00070	.00000	.00020	.29370	.16290	1.80200
4.591	17.980	-.11000	.37040	.02480	.07780	.00110	.00000	.00020	.33080	.18070	1.83030
4.591	19.260	-.11000	.41450	.02580	.07650	.00180	.00010	.00020	.36870	.20130	1.83090
4.591	20.540	-.12000	.45900	.02660	.07530	.00240	.00000	.00020	.40620	.22400	1.81340
4.591	21.830	-.13000	.50420	.02780	.07410	.00300	.00000	.00030	.44340	.24870	1.78280
4.591	23.120	-.14000	.55060	.02870	.07290	.00360	-.00010	.00040	.48090	.27580	1.74370
4.591	24.410	-.14000	.59900	.02910	.07180	.00430	-.00020	.00050	.51920	.30540	1.69980
4.591	25.700	-.15000	.64750	.02950	.07070	.00480	-.00030	.00060	.55630	.33710	1.65020
4.591	26.990	-.16000	.69680	.02990	.07000	.00530	-.00040	.00050	.59290	.37120	1.59720
4.591	28.260	-.17000	.74800	.03030	.06910	.00600	-.00050	.00050	.63000	.40780	1.54470
4.591	29.540	-.17000	.79870	.03040	.06820	.00670	-.00050	.00060	.66530	.44590	1.49210
4.591	30.750	-.18000	.84780	.03070	.06750	.00680	-.00040	.00050	.69830	.48430	1.44170
4.591	31.670	-.18000	.88680	.03020	.06710	.00670	-.00030	.00050	.72380	.51570	1.40350
4.591	32.180	-.19000	.90860	.03010	.06660	.00670	-.00020	.00040	.73790	.53320	1.38380
	GRADIENT	-.00555	.02256	.00001	-.00316	.00030	-.00004	-.00003	.02092	-.00349	.18715

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (8WVFO) (RHY053) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. X0		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. Y0		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. Z0		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1041/ 0 RN/L = 16.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.460	.00000	-.10310	.01900	.11370	-.00410	.00000	.00070	-.10390	.10500	-.98980
4.591	1.140	.00000	-.08690	.01860	.11130	-.00390	.00000	.00070	-.08890	.10160	-.87470
4.591	1.930	.00000	-.06910	.01820	.10870	-.00380	.00000	.00060	-.07250	.09830	-.73780
4.591	2.760	-.01000	-.04990	.01830	.10600	-.00350	.00000	.00050	-.05450	.09540	-.57210
4.591	3.590	-.02000	-.03010	.01840	.10330	-.00330	-.00010	.00060	-.03600	.09300	-.38760
4.591	4.430	-.02000	-.01040	.01820	.10060	-.00300	-.00020	.00060	-.01750	.09120	-.19190
4.591	5.290	-.03000	.01080	.01830	.09920	-.00280	-.00020	.00050	.00240	.09040	.02730
4.591	6.150	-.03000	.03180	.01840	.09510	-.00290	-.00020	.00050	.02220	.09040	.24620
4.591	7.030	-.04000	.05400	.01860	.09430	-.00280	-.00020	.00060	.04310	.09160	.47060
4.591	7.940	-.04000	.07730	.01900	.09270	-.00230	-.00020	.00050	.06490	.09380	.69180
4.591	8.810	-.05000	.09980	.01940	.09130	-.00200	-.00020	.00050	.08600	.09690	.88750
4.591	9.710	-.05000	.12370	.02000	.08990	-.00190	-.00020	.00040	.10820	.10080	1.07300
4.591	10 640	-.06000	.14940	.02030	.08840	-.00180	-.00030	.00030	.13210	.10590	1.24770
4.591	11.570	-.07000	.17520	.02070	.08710	-.00160	-.00030	.00030	.15600	.11190	1.39390
4.591	12.460	-.07000	.20160	.02110	.08580	-.00130	-.00020	.00030	.18020	.11870	1.51780
4.591	13.430	-.08000	.22970	.02130	.08430	-.00100	-.00030	.00020	.20590	.12680	1.62260
4.591	14.370	-.08000	.25860	.02180	.08260	-.00060	-.00020	.00020	.23210	.13580	1.70960
4.591	15.320	-.09000	.28800	.02220	.08150	-.00020	-.00010	.00020	.25850	.14630	1.76680
4.591	16.280	-.10000	.31900	.02290	.08000	.00010	.00000	.00020	.28620	.15800	1.81160
4.591	17.250	-.10000	.35100	.02350	.07870	.00050	.00000	.00020	.31440	.17100	1.83880
4.591	18.230	-.11000	.38470	.02420	.07750	.00090	.00000	.00020	.34380	.18580	1.84970
4.591	19.210	-.11000	.41790	.02510	.07650	.00160	.00000	.00020	.37230	.20170	1.84560
4.591	20.180	-.12000	.45180	.02550	.07560	.00210	.00000	.00020	.40090	.21880	1.83200
4.591	21.180	-.13000	.48700	.02610	.07470	.00260	.00000	.00020	.43010	.23770	1.80950
4.591	22.200	-.13000	.52340	.02690	.07370	.00300	.00000	.00030	.45990	.25820	1.78110
4.591	23.200	-.14000	.56050	.02760	.07280	.00340	-.00010	.00040	.48980	.28000	1.74920
4.591	24.180	-.14000	.59630	.02780	.07200	.00410	-.00030	.00050	.51790	.30230	1.71310
4.591	25.230	-.15000	.63610	.02830	.07140	.00510	-.00050	.00050	.54860	.32810	1.67210
4.591	26.280	-.15000	.67660	.02860	.07060	.00530	-.00050	.00050	.57900	.35540	1.62900
4.591	27.300	-.16000	.71570	.02880	.07000	.00570	-.00050	.00050	.60770	.38310	1.58630
4.591	28.310	-.17000	.75630	.02880	.06920	.00630	-.00050	.00060	.63690	.41230	1.54480
4.591	29.350	-.17000	.79800	.02880	.06830	.00690	-.00060	.00060	.66610	.44350	1.50190
4.591	30.450	-.18000	.84300	.02860	.06740	.00690	-.00040	.00060	.69670	.47820	1.45670
4.591	31.650	-.19000	.89080	.02870	.06670	.00700	-.00020	.00050	.72770	.51720	1.40690
4.591	32.320	-.19000	.91600	.02860	.06640	.00660	-.00030	.00040	.74330	.53900	1.37890
	GRADIENT	-.00612	.02330	-.00016	-.00329	.00027	-.00005	-.00003	.02172	-.00347	.20076

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY054) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 43/ 0 RN/L = 16.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.480	.00000	-.10530	.01930	.11440	-.00360	.00000	.00070	-.10620	.10820	-.98110
4.591	1.690	.00000	-.07790	.01900	.11040	-.00350	.00000	.00060	-.08100	.10250	-.78980
4.591	2.690	-.01000	-.05390	.01910	.10690	-.00330	.00000	.00060	-.05860	.09850	-.59450
4.591	3.580	-.02000	-.03350	.01860	.10400	-.00310	-.00020	.00060	-.03950	.09580	-.41300
4.591	4.520	-.02000	-.01070	.01840	.10110	-.00270	-.00020	.00060	-.01820	.09390	-.19430
4.591	5.460	-.03000	.01230	.01830	.09830	-.00230	-.00030	.00050	.00350	.09290	.03790
4.591	6.390	-.03000	.03560	.01820	.09600	-.00260	-.00020	.00050	.02540	.09310	.27300
4.591	7.330	-.04000	.05950	.01860	.09400	-.00250	-.00020	.00050	.04780	.09430	.50700
4.591	8.270	-.04000	.08390	.01900	.09250	-.00210	-.00030	.00050	.07060	.09700	.72810
4.591	9.210	-.05000	.10860	.01940	.09110	-.00170	-.00030	.00040	.09370	.10060	.93140
4.591	10.140	-.06000	.13380	.01990	.08970	-.00160	-.00030	.00040	.11710	.10500	1.11500
4.591	11.090	-.06000	.16030	.02050	.08830	-.00160	-.00030	.00030	.14160	.11060	1.28050
4.591	12.030	-.07000	.18640	.02090	.08700	-.00140	-.00030	.00030	.16560	.11690	1.41700
4.591	12.980	-.07000	.21470	.02080	.08540	-.00110	-.00030	.00030	.19160	.12430	1.54120
4.591	13.930	-.08000	.24520	.02040	.08360	-.00060	-.00030	.00030	.21970	.13300	1.65200
4.591	14.890	-.09000	.27660	.02000	.08170	-.00020	-.00020	.00030	.24820	.14280	1.73750
4.591	15.830	-.09000	.30800	.02020	.08000	.00010	-.00010	.00030	.27650	.15370	1.79820
4.591	16.790	-.10000	.33680	.02130	.07900	.00050	.00000	.00030	.30180	.16560	1.82180
4.591	17.740	-.10000	.36650	.02270	.07810	.00090	.00000	.00020	.32760	.17870	1.83280
4.591	18.690	-.11000	.39650	.02450	.07740	.00140	.00000	.00020	.35320	.19290	1.83060
4.591	19.630	-.12000	.42910	.02520	.07660	.00190	.00000	.00020	.38100	.20890	1.82390
4.591	20.590	-.12000	.46290	.02590	.07560	.00230	.00000	.00020	.40940	.22610	1.81000
4.591	21.540	-.13000	.49630	.02650	.07470	.00270	-.00010	.00030	.43720	.24420	1.78960
4.591	22.490	-.13000	.53060	.02730	.07370	.00320	-.00020	.00040	.46530	.26380	1.76380
4.591	23.440	-.14000	.56500	.02780	.07290	.00360	-.00030	.00050	.49250	.28420	1.73280
4.591	24.380	-.14000	.60000	.02830	.07200	.00400	-.00030	.00060	.52000	.30600	1.69940
4.591	25.320	-.15000	.63550	.02850	.07130	.00450	-.00050	.00070	.54740	.32900	1.66370
4.591	26.270	-.15000	.67170	.02890	.07060	.00470	-.00050	.00070	.57460	.35340	1.62570
4.591	27.200	-.16000	.70750	.02920	.07020	.00510	-.00050	.00060	.60080	.37870	1.58640
4.591	28.140	-.16000	.74420	.02970	.06980	.00550	-.00050	.00060	.62710	.40540	1.54700
4.591	29.060	-.17000	.78070	.03000	.06910	.00610	-.00060	.00060	.65270	.43250	1.50910
4.591	29.990	-.18000	.81770	.03020	.06830	.00640	-.00060	.00070	.67810	.46080	1.47160
4.591	30.890	-.18000	.85410	.03020	.06770	.00640	-.00050	.00060	.70230	.48970	1.43420
4.591	31.770	-.19000	.88980	.03000	.06700	.00640	-.00030	.00050	.72540	.51860	1.39880
4.591	32.510	-.19000	.92060	.02990	.06670	.00650	-.00030	.00050	.74480	.54410	1.36880
	GRADIENT	-.00594	.02342	-.00022	-.00331	.00023	-.00006	-.00002	.02180	-.00357	.19480

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY055) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1043/ 0 RN/L = 16.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.300	.00000	-.10670	.01960	.11440	-.00440	.00000	.00070	-.10730	.10570	-1.01440
4.591	.740	.00000	-.09580	.01890	.11280	-.00450	.00000	.00060	-.09710	.10350	-.93880
4.591	1.550	.00000	-.07720	.01850	.11000	-.00430	.00000	.00060	-.07990	.09970	-.80130
4.591	2.550	-.01000	-.05400	.01820	.10660	-.00400	.00000	.00050	-.05830	.09590	-.60830
4.591	3.630	-.01000	-.02820	.01780	.10320	-.00370	-.00010	.00050	-.03420	.09290	-.36860
4.591	4.760	-.02000	-.00110	.01770	.09980	-.00340	-.00020	.00050	-.00860	.09100	-.09550
4.591	5.940	-.03000	.02810	.01770	.09670	-.00330	-.00030	.00050	.01890	.09070	.20830
4.591	7.140	-.04000	.05850	.01800	.09420	-.00310	-.00020	.00050	.04740	.09230	.51370
4.591	8.350	-.04000	.09030	.01830	.09220	-.00260	-.00030	.00050	.07720	.09590	.80420
4.591	9.570	-.05000	.12290	.01900	.09020	-.00240	-.00030	.00040	.10760	.10110	1.06410
4.591	10.810	-.06000	.15690	.01960	.08830	-.00220	-.00030	.00030	.13910	.10790	1.28830
4.591	12.060	-.07000	.19200	.02020	.08650	-.00190	-.00030	.00030	.17150	.11650	1.47150
4.591	13.320	-.08000	.23070	.01980	.08430	-.00130	-.00030	.00030	.20700	.12700	1.62920
4.591	14.600	-.08000	.27270	.01910	.08180	-.00080	-.00020	.00030	.24530	.13980	1.75420
4.591	15.880	-.09000	.31510	.01900	.07950	-.00020	-.00010	.00030	.28360	.15470	1.83250
4.591	17.170	-.10000	.35500	.02070	.07820	.00030	.00000	.00030	.31850	.17160	1.85600
4.591	18.460	-.11000	.39580	.02270	.07730	.00080	.00000	.00020	.35350	.19080	1.85300
4.591	19.770	-.12000	.44040	.02420	.07610	.00150	.00000	.00020	.39150	.21270	1.84000
4.591	21.080	-.12000	.48700	.02490	.07480	.00220	-.00010	.00020	.43050	.23720	1.81430
4.591	22.430	-.13000	.53550	.02580	.07360	.00300	-.00030	.00040	.47010	.26470	1.77570
4.591	23.760	-.14000	.58370	.02660	.07250	.00370	-.00050	.00050	.50830	.29410	1.72820
4.591	25.090	-.15000	.63400	.02720	.07150	.00460	-.00070	.00060	.54730	.32620	1.67750
4.591	26.430	-.16000	.68520	.02760	.07060	.00500	-.00060	.00060	.58570	.36090	1.62290
4.591	27.740	-.16000	.73640	.02830	.06980	.00570	-.00050	.00060	.62300	.39730	1.56780
4.591	29.080	-.17000	.78990	.02870	.06910	.00630	-.00050	.00060	.66060	.43720	1.51090
4.591	30.380	-.18000	.84070	.02930	.06830	.00660	-.00050	.00070	.69480	.47710	1.45630
4.591	31.460	-.18000	.88320	.02950	.06760	.00660	-.00030	.00060	.72230	.51180	1.41130
4.591	32.210	-.19000	.91220	.02970	.06730	.00680	-.00020	.00060	.74020	.53630	1.38010
4.591	32.680	-.19000	.92990	.02950	.06650	.00650	-.00030	.00050	.75110	.55130	1.36250
	GRADIENT	-.00449	.02359	-.00039	-.00328	.00025	-.00004	-.00004	.02202	-.00335	.20481

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (8WVF0) (RHY056) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = 15.000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 6.000 A-SCHD = 1.000
PHI = .000

RUN NO. 52/ 0 RN/L = 16.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.360	.00000	-.03500	-.02720	.09660	-.00280	.00000	.00020	-.03560	.08930	-.39830
4.591	1.700	.00000	-.00690	-.02680	.09420	-.00330	.00000	.00020	-.00950	.08680	-.10940
4.591	2.830	-.01000	.01780	-.02720	.09260	-.00350	-.00010	.00020	.01360	.08620	.15830
4.591	3.840	-.02000	.04090	-.02760	.09140	-.00230	-.00030	.00030	.03510	.08670	.40580
4.591	4.880	-.02000	.06750	-.02850	.09030	-.00200	-.00030	.00040	.06020	.08840	.68130
4.591	5.920	-.03000	.09440	-.02980	.08900	-.00140	-.00040	.00040	.08540	.09090	.94000
4.591	6.960	-.04000	.12090	-.03160	.08860	-.00220	-.00030	.00030	.11020	.09510	1.15800
4.591	8.010	-.04000	.15100	-.03250	.08790	-.00170	-.00020	.00020	.13830	.10060	1.37510
4.591	9.080	-.05000	.18100	-.03410	.08750	-.00110	.00000	.00020	.16610	.10740	1.54680
4.591	10.120	-.06000	.21150	-.03610	.08710	-.00100	.00000	.00020	.19430	.11520	1.68530
4.591	11.180	-.06000	.24340	-.03820	.08700	-.00110	.00000	.00010	.22350	.12480	1.79010
4.591	12.230	-.07000	.27690	-.04030	.08670	-.00090	-.00010	.00010	.25390	.13570	1.87120
4.591	13.300	-.08000	.31170	-.04280	.08660	-.00060	-.00020	.00010	.28520	.14820	1.92460
4.591	14.350	-.08000	.34800	-.04570	.08660	-.00030	-.00020	.00000	.31760	.16240	1.95540
4.591	15.400	-.09000	.38410	-.04790	.08670	-.00010	-.00020	.00000	.34930	.17790	1.96360
4.591	16.470	-.10000	.42160	-.05040	.08680	.00040	-.00010	.00000	.38190	.19510	1.95750
4.591	17.530	-.10000	.45930	-.05300	.08710	.00080	-.00020	.00000	.41410	.21380	1.93670
4.591	18.590	-.11000	.49870	-.05610	.08750	.00130	-.00020	.00000	.44740	.23430	1.90910
4.591	19.650	-.12000	.53870	-.05900	.08790	.00170	-.00020	.00000	.48040	.25630	1.87400
4.591	20.710	-.12000	.58030	-.06190	.08840	.00210	-.00020	.00000	.51430	.28040	1.83370
4.591	21.780	-.13000	.62270	-.06490	.08900	.00240	-.00030	.00000	.54820	.30620	1.79040
4.591	22.840	-.13000	.66570	-.06790	.08970	.00300	-.00040	.00010	.58180	.33360	1.74360
4.591	23.900	-.14000	.70900	-.07090	.09040	.00360	-.00050	.00020	.61480	.36250	1.69580
4.591	24.960	-.15000	.75370	-.07420	.09110	.00420	-.00060	.00030	.64820	.39340	1.64770
4.591	26.010	-.15000	.79940	-.07790	.09190	.00460	-.00060	.00030	.68160	.42600	1.60000
4.591	27.070	-.16000	.84560	-.08200	.09260	.00480	-.00050	.00030	.71440	.46010	1.55270
4.591	28.110	-.17000	.89080	-.08620	.09320	.00520	-.00040	.00030	.74550	.49490	1.50630
4.591	29.150	-.17000	.93630	-.09020	.09380	.00560	-.00050	.00030	.77590	.53090	1.46120
4.591	30.180	-.18000	.98330	-.09430	.09450	.00600	-.00050	.00030	.80650	.56910	1.41710
4.591	31.200	-.18000	1.03010	-.09810	.09510	.00580	-.00030	.00020	.83590	.60820	1.37430
4.591	32.140	-.19000	1.07240	-.10200	.09570	.00600	-.00020	.00010	.86130	.64480	1.33570
	GRADIENT	-.00531	.02257	-.00029	-.00139	.00022	-.00008	.00004	.02108	-.00021	.23869

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (RHY057) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 51/ 0 RN/L = 16.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.310	.00000	-.03540	-.02810	.09620	-.00260	-.00050	-.00010	-.03580	.08870	-.40450
4.591	1.650	.00000	-.00740	-.02800	.09400	-.00170	-.00060	-.00010	-.00990	.08630	-.11540
4.591	2.790	-.01000	.01750	-.02860	.09250	-.00190	-.00060	-.00010	.01330	.08580	.15580
4.591	3.790	-.02000	.04060	-.02920	.09130	-.00150	-.00050	-.00010	.03500	.08620	.40570
4.591	4.850	-.02000	.06640	-.02950	.08980	-.00150	-.00070	-.00020	.05920	.08740	.67730
4.591	5.880	-.03000	.09350	-.03030	.08850	-.00180	-.00100	-.00010	.08480	.08990	.94310
4.591	6.940	-.04000	.12130	-.03150	.08770	-.00160	-.00090	-.00010	.11070	.09390	1.17870
4.591	7.990	-.04000	.14910	-.03240	.08720	-.00110	-.00090	-.00010	.13670	.09920	1.37720
4.591	9.040	-.05000	.17880	-.03380	.08670	-.00090	-.00080	-.00010	.16420	.10590	1.55040
4.591	10.080	-.06000	.20880	-.03540	.08640	-.00060	-.00080	-.00010	.19180	.11370	1.68640
4.591	11.140	-.06000	.24130	-.03740	.08620	-.00060	-.00070	-.00010	.22170	.12330	1.79790
4.591	12.200	-.07000	.27450	-.03980	.08620	-.00040	-.00060	-.00010	.25180	.13430	1.87500
4.591	13.260	-.08000	.30850	-.04210	.08620	.00000	-.00060	-.00010	.28240	.14660	1.92570
4.591	14.310	-.08000	.34420	-.04460	.08630	.00020	-.00060	-.00010	.31420	.16070	1.95560
4.591	15.370	-.09000	.38110	-.04690	.08640	.00050	-.00050	-.00020	.34670	.17630	1.96620
4.591	16.440	-.10000	.41870	-.04940	.08650	.00090	-.00040	-.00020	.37940	.19340	1.96100
4.591	17.500	-.10000	.45740	-.05230	.08670	.00130	-.00040	-.00020	.41270	.21230	1.94350
4.591	18.550	-.11000	.49670	-.05520	.08700	.00170	-.00040	-.00020	.44580	.23260	1.91620
4.591	19.620	-.12000	.53700	-.05810	.08750	.00200	-.00030	-.00020	.47920	.25490	1.87970
4.591	20.680	-.12000	.57800	-.06110	.08800	.00240	-.00030	-.00010	.51260	.27860	1.83960
4.591	21.750	-.13000	.62040	-.06400	.08860	.00300	-.00030	.00000	.54650	.30440	1.79510
4.591	22.810	-.13000	.66390	-.06720	.08940	.00350	-.00050	.00000	.58060	.33200	1.74830
4.591	23.860	-.14000	.70770	-.07070	.09010	.00410	-.00060	.00010	.61420	.36100	1.70100
4.591	24 920	-.15000	.75300	-.07430	.09080	.00450	-.00070	.00020	.64820	.39210	1.65310
4.591	25.990	-.15000	.79940	-.07820	.09140	.00480	-.00070	.00030	.68210	.42500	1.60490
4.591	27.050	-.16000	.84570	-.08240	.09220	.00470	-.00070	.00030	.71510	.45920	1.55720
4.591	28.070	-.16000	.89100	-.08700	.09290	.00510	-.00060	.00030	.74630	.49390	1.51100
4.591	29.110	-.17000	.93810	-.09130	.09360	.00580	-.00070	.00030	.77810	.53090	1.46550
4.591	30 150	-.18000	.98550	-.09550	.09430	.00620	-.00070	.00030	.80900	.56930	1.42100
4.591	31.160	-.18000	1.03230	-.09970	.09500	.00610	-.00050	.00010	.83840	.60840	1.37810
4.591	32.110	-.19000	1.07660	-.10390	.09570	.00630	-.00050	.00010	.86530	.64640	1.33650
4.591	32.640	-.19000	1.10240	-.10660	.09620	.00630	-.00050	.00000	.88080	.66870	1.31710
	GRADIENT	-.00529	.02239	-.00035	-.00139	.00022	-.00003	-.00002	.02090	-.00027	.23879

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY058) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	30.000		

RUN NO. 61/ 0 RN/L = 15.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.690	-5.22000	-.08190	.00560	.10650	.08420	-.00930	-.00680	-.08310	.09790	-.84920
4.591	1.910	-4.54000	-.05500	.00540	.10240	.07110	-.00790	-.00590	-.05820	.09280	-.62710
4.591	2.880	-4.01000	-.03140	.00530	.09910	.06110	-.00710	-.00530	-.03600	.08960	-.40180
4.591	3.780	-3.51000	-.01020	.00450	.09650	.05320	-.00650	-.00480	-.01600	.08780	-.18330
4.591	4.700	-3.00000	.01260	.00410	.09380	.04540	-.00560	-.00450	.00550	.08670	.06360
4.591	5.620	-2.49000	.03550	.00440	.09100	.03760	-.00490	-.00440	.02720	.08620	.31580
4.591	6.540	-1.98000	.05810	.00470	.08890	.02950	-.00440	-.00430	.04850	.08700	.55750
4.591	7.470	-1.46000	.08130	.00490	.08700	.02180	-.00380	-.00440	.07030	.08890	.79050
4.591	8.400	-.95000	.10510	.00540	.08560	.01440	-.00340	-.00460	.09260	.09210	1.00540
4.591	9.330	-.43000	.12930	.00600	.08440	.00800	-.00330	-.00490	.11520	.09630	1.19710
4.591	10.250	.07000	.15470	.00620	.08300	.00160	-.00330	-.00540	.13890	.10120	1.37200
4.591	11.190	.59000	.18130	.00620	.08180	-.00490	-.00310	-.00590	.16360	.10730	1.52410
4.591	12.120	1.11000	.20890	.00590	.08040	-.01130	-.00280	-.00660	.18910	.11430	1.65330
4.591	13.050	1.62000	.23660	.00590	.07930	-.01770	-.00270	-.00740	.21450	.12250	1.75100
4.591	13.990	2.14000	.26560	.00590	.07830	-.02310	-.00290	-.00820	.24080	.13190	1.82520
4.591	14.920	2.65000	.29560	.00540	.07690	-.02860	-.00310	-.00890	.26800	.14220	1.88470
4.591	15.870	3.17000	.32680	.00480	.07540	-.03480	-.00320	-.00990	.29600	.15360	1.92680
4.591	16.810	3.69000	.35840	.00430	.07400	-.04060	-.00350	-.01090	.32420	.16620	1.95040
4.591	17.750	4.20000	.39090	.00390	.07300	-.04540	-.00420	-.01180	.35270	.18040	1.95440
4.591	18.690	4.71000	.42320	.00330	.07190	-.05020	-.00500	-.01280	.38060	.19550	1.94690
4.591	19.630	5.22000	.45610	.00300	.07100	-.05530	-.00590	-.01380	.40860	.21190	1.92820
4.591	20.580	5.74000	.48960	.00240	.07010	-.06040	-.00680	-.01490	.43680	.22950	1.90260
4.591	21.520	6.24000	.52390	.00150	.06940	-.06560	-.00750	-.01610	.46510	.24860	1.87070
4.591	22.460	6.74000	.55820	.00080	.06900	-.07050	-.00830	-.01730	.49290	.26890	1.83250
4.591	23.410	7.24000	.59330	.00010	.06880	-.07490	-.00930	-.01860	.52060	.29070	1.79070
4.591	24.360	7.75000	.62900	-.00010	.06870	-.07910	-.01040	-.01980	.54830	.31390	1.74640
4.591	25.300	8.24000	.66420	-.00020	.06850	-.08340	-.01150	-.02120	.57490	.33780	1.70190
4.591	26.240	8.72000	.70010	-.00070	.06830	-.08790	-.01250	-.02260	.60170	.36280	1.65820
4.591	27.180	9.21000	.73620	-.00110	.06810	-.09240	-.01340	-.02420	.62780	.38910	1.61360
4.591	28.110	9.68000	.77190	-.00160	.06790	-.09680	-.01410	-.02590	.65310	.41570	1.57080
4.591	29.010	10.14000	.80800	-.00260	.06750	-.10100	-.01480	-.02780	.67820	.44310	1.53030
4.591	29.760	10.52000	.83790	-.00380	.06740	-.10470	-.01540	-.02940	.69820	.46680	1.49580
	GRADIENT	.55311	.02361	-.00039	-.00317	-.00969	.00089	.00058	.02215	-.00281	.22840

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY059) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 5.000 A-SCHD = 2.000
PHI = 30.000

RUN NO. 1061/ 0 RN/L = 16.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.310	-5.42000	-.08900	.00590	.10740	.08560	-.00940	-.00700	-.08950	.09840	-.91020
4.591	.550	-5.29000	-.08300	.00560	.10650	.08260	-.00910	-.00680	-.08390	.09710	-.86410
4.591	1.120	-4.98000	-.06920	.00570	.10460	.07620	-.00840	-.00630	-.07110	.09450	-.75220
4.591	1.960	-4.51000	-.05040	.00510	.10140	.06750	-.00770	-.00570	-.05350	.09100	-.58820
4.591	2.870	-4.01000	-.02920	.00450	.09850	.05890	-.00680	-.00520	-.03360	.08820	-.38160
4.591	3.800	-3.50000	-.00670	.00420	.09550	.05040	-.00610	-.00480	-.01250	.08610	-.14530
4.591	4.770	-2.96000	.01690	.00400	.09280	.04200	-.00530	-.00450	.00980	.08510	.11620
4.591	5.760	-2.41000	.04190	.00390	.09020	.03330	-.00460	-.00440	.03350	.08510	.39410
4.591	6.800	-1.84000	.06750	.00430	.08800	.02460	-.00390	-.00440	.05770	.08660	.66620
4.591	7.870	-1.24000	.09660	.00570	.08620	.01600	-.00340	-.00450	.08510	.08980	.94810
4.591	8.920	-.66000	.12220	.00530	.08470	.00820	-.00320	-.00490	.10890	.09380	1.16130
4.591	9.990	-.06000	.15160	.00550	.08330	.00070	-.00300	-.00530	.13640	.09950	1.37120
4.591	11.090	.53000	.18290	.00560	.08170	-.00680	-.00280	-.00600	.16540	.10660	1.55240
4.591	12.180	1.14000	.21540	.00540	.08030	-.01420	-.00260	-.00690	.19550	.11510	1.69800
4.591	13.280	1.75000	.24840	.00550	.07890	-.02110	-.00260	-.00770	.22570	.12510	1.80400
4.591	14.390	2.36000	.28390	.00480	.07740	-.02790	-.00280	-.00870	.25800	.13690	1.88440
4.591	15.510	2.98000	.32030	.00390	.07570	-.03470	-.00300	-.00970	.29080	.14990	1.93940
4.591	16.630	3.59000	.35840	.00340	.07400	-.04120	-.00340	-.01080	.32480	.16490	1.96920
4.591	17.770	4.21000	.39720	.00260	.07250	-.04730	-.00410	-.01200	.35890	.18170	1.97440
4.591	18.910	4.83000	.43700	.00230	.07130	-.05340	-.00500	-.01320	.39320	.20060	1.96010
4.591	20.080	5.47000	.47870	.00140	.07030	-.05960	-.00610	-.01450	.42850	.22210	1.92950
4.591	21.270	6.11000	.52130	.00030	.06960	-.06570	-.00730	-.01600	.46380	.24570	1.88710
4.591	22.460	6.74000	.56500	-.00020	.06920	-.07140	-.00850	-.01750	.49910	.27150	1.83800
4.591	23.640	7.37000	.60910	-.00100	.06890	-.07680	-.00980	-.01910	.53390	.29930	1.78390
4.591	24.840	7.99000	.65380	-.00160	.06870	-.08190	-.01110	-.02060	.56820	.32890	1.72720
4.591	26.010	8.60000	.69850	-.00190	.06850	-.08750	-.01240	-.02240	.60160	.35990	1.67130
4.591	27.200	9.21000	.74440	-.00220	.06840	-.09290	-.01350	-.02440	.63490	.39320	1.61470
4.591	28.290	9.77000	.78640	-.00260	.06810	-.09790	-.01430	-.02650	.66440	.42490	1.56340
4.591	29.170	10.22000	.81970	-.00320	.06790	-.10200	-.01490	-.02820	.68700	.45110	1.52290
4.591	29.730	10.50000	.84010	-.00360	.06780	-.10450	-.01540	-.02940	.70030	.46780	1.49680
4.591	29.930	10.60000	.84610	-.00410	.06740	-.10550	-.01560	-.02980	.70400	.47280	1.48880
	GRADIENT	.55168	.02360	-.00045	-.00331	-.00976	.00091	.00057	.02212	-.00308	.22764

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY060) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	-30.000		

RUN NO. 62/ 0 RN/L = 15.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.760	5.23000	-.06140	-.00250	.09890	-.08090	-.00020	-.00810	-.06260	.09030	-.69330
4.591	1.970	4.54000	-.03700	-.00170	.09650	-.06950	-.00060	-.00830	-.04010	.08740	-.45900
4.591	2.930	4.00000	-.01490	-.00090	.09370	-.06030	-.00110	-.00810	-.01930	.08500	-.22760
4.591	3.830	3.49000	.00490	-.00040	.09160	-.05290	-.00140	-.00800	-.00060	.08380	-.00740
4.591	4.740	2.97000	.02640	.00000	.08960	-.04560	-.00150	-.00790	.01960	.08370	.23440
4.591	5.660	2.44000	.04750	.00090	.08780	-.03790	-.00170	-.00770	.03940	.08420	.46840
4.591	6.570	1.92000	.06920	.00210	.08620	-.03020	-.00210	-.00760	.05970	.08570	.69760
4.591	7.490	1.39000	.09130	.00310	.08490	-.02250	-.00240	-.00740	.08050	.08820	.91300
4.591	8.410	.87000	.11380	.00430	.08400	-.01510	-.00270	-.00730	.10150	.09180	1.10530
4.591	9.320	.34000	.13720	.00510	.08310	-.00810	-.00270	-.00700	.12330	.09630	1.28040
4.591	10.250	-.18000	.16170	.00590	.08200	-.00160	-.00260	-.00670	.14600	.10140	1.43940
4.591	11.170	-.70000	.18730	.00620	.08100	.00490	-.00250	-.00620	.16960	.10760	1.57580
4.591	12.090	-1.23000	.21320	.00650	.07990	.01150	-.00240	-.00570	.19350	.11470	1.68590
4.591	13.020	-1.76000	.24030	.00670	.07900	.01800	-.00210	-.00500	.21820	.12300	1.77330
4.591	13.950	-2.29000	.26760	.00750	.07830	.02380	-.00160	-.00440	.24290	.13240	1.83460
4.591	14.890	-2.82000	.29640	.00770	.07740	.02930	-.00090	-.00380	.26880	.14270	1.88270
4.591	15.820	-3.35000	.32670	.00760	.07620	.03540	-.00030	-.00300	.29590	.15420	1.91810
4.591	16.760	-3.88000	.35730	.00810	.07520	.04130	.00030	-.00220	.32290	.16680	1.93570
4.591	17.680	-4.40000	.38820	.00830	.07420	.04670	.00120	-.00160	.35000	.18040	1.93980
4.591	18.630	-4.93000	.42050	.00830	.07330	.05200	.00220	-.00090	.37780	.19560	1.93120
4.591	19.560	-5.45000	.45270	.00850	.07270	.05700	.00330	-.00030	.40510	.21200	1.91050
4.591	20.500	-5.97000	.48570	.00870	.07200	.06190	.00440	.00020	.43280	.22940	1.88630
4.591	21.440	-6.49000	.51950	.00900	.07150	.06670	.00540	.00100	.46060	.24840	1.85380
4.591	22.390	-7.00000	.55400	.00890	.07110	.07160	.00630	.00190	.48840	.26870	1.81770
4.591	23.330	-7.52000	.58870	.00940	.07070	.07620	.00740	.00280	.51600	.29020	1.77810
4.591	24.270	-8.02000	.62320	.00940	.07050	.08060	.00840	.00360	.54260	.31250	1.73610
4.591	25.210	-8.53000	.65870	.00960	.07060	.08520	.00950	.00440	.56960	.33650	1.69230
4.591	26.140	-9.03000	.69300	.00950	.07050	.08960	.01050	.00530	.59480	.36090	1.64800
4.591	27.070	-9.52000	.72810	.00930	.07040	.09410	.01150	.00630	.62020	.38640	1.60510
4.591	28.000	-10.01000	.76440	.00910	.07030	.09880	.01230	.00750	.64590	.41330	1.56260
4.591	28.900	-10.48000	.79960	.00840	.07000	.10340	.01310	.00880	.67030	.44020	1.52240
4.591	29.660	-10.87000	.82910	.00790	.06980	.10710	.01380	.00990	.69020	.46340	1.48920
	GRADIENT	-.56722	.02211	.00064	-.00239	.00890	-.00035	.00007	.02072	-.00174	.23404

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY061) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	-30.000		

RUN NO. 1062/ 0 RN/L = 16.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.380	5.45000	-.06810	-.00300	.09990	-.08400	-.00010	-.00830	-.06870	.09100	-.75550
4.591	.600	5.32000	-.06320	-.00290	.09940	-.08160	-.00030	-.00830	-.06420	.09020	-.71190
4.591	1.140	5.02000	-.05120	-.00260	.09800	-.07600	-.00050	-.00830	-.05300	.08840	-.59920
4.591	1.950	4.56000	-.03360	-.00210	.09590	-.06810	-.00090	-.00820	-.03660	.08620	-.42450
4.591	2.850	4.04000	-.01370	-.00160	.09360	-.06000	-.00130	-.00820	-.01800	.08420	-.21350
4.591	3.740	3.54000	.00580	-.00130	.09130	-.05230	-.00150	-.00800	.00040	.08290	.00480
4.591	4.650	3.02000	.02730	-.00030	.08940	-.04470	-.00170	-.00790	.02060	.08270	.25010
4.591	5.610	2.47000	.04920	.00060	.08750	-.03660	-.00200	-.00770	.04130	.08320	.49600
4.591	6.610	1.90000	.07370	.00170	.08600	-.02850	-.00240	-.00760	.06430	.08510	.75530
4.591	7.650	1.30000	.09830	.00310	.08460	-.01990	-.00280	-.00740	.08730	.08830	.98860
4.591	8.710	.70000	.12490	.00430	.08360	-.01140	-.00290	-.00720	.11210	.09280	1.20720
4.591	9.760	.10000	.15280	.00510	.08250	-.00380	-.00290	-.00680	.13810	.09850	1.40180
4.591	10.840	-.51000	.18240	.00550	.08130	.00390	-.00280	-.00630	.16550	.10550	1.56870
4.591	11.910	-1.13000	.21310	.00570	.08010	.01160	-.00260	-.00570	.19380	.11380	1.70290
4.591	12.990	-1.74000	.24510	.00590	.07900	.01900	-.00220	-.00490	.22300	.12350	1.80480
4.591	14.100	-2.37000	.27760	.00670	.07800	.02600	-.00160	-.00420	.25230	.13480	1.87220
4.591	15.190	-3.00000	.31220	.00670	.07680	.03270	-.00080	-.00330	.28340	.14750	1.92150
4.591	16.300	-3.62000	.34820	.00670	.07550	.03960	.00000	-.00250	.31550	.16180	1.94910
4.591	17.420	-4.25000	.38560	.00710	.07440	.04620	.00100	-.00170	.34830	.17810	1.95540
4.591	18.540	-4.88000	.42400	.00720	.07330	.05230	.00220	-.00090	.38140	.19610	1.94440
4.591	19.680	-5.51000	.46350	.00740	.07250	.05840	.00350	-.00010	.41490	.21620	1.91870
4.591	20.850	-6.16000	.50450	.00760	.07180	.06440	.00480	.00070	.44900	.23860	1.88140
4.591	22.030	-6.81000	.54760	.00770	.07120	.07030	.00610	.00170	.48420	.26340	1.83810
4.591	23.200	-7.45000	.59020	.00790	.07090	.07620	.00730	.00270	.51800	.28970	1.78750
4.591	24.400	-8.09000	.63470	.00800	.07070	.08180	.00870	.00380	.55230	.31870	1.73280
4.591	25.570	-8.72000	.67840	.00810	.07060	.08750	.01000	.00480	.58520	.34880	1.67770
4.591	26.770	-9.36000	.72330	.00800	.07060	.09330	.01130	.00610	.61780	.38110	1.62110
4.591	27.910	-9.96000	.76720	.00830	.07060	.09900	.01240	.00760	.64890	.41390	1.56760
4.591	28.870	-10.45000	.80310	.00810	.07040	.10380	.01320	.00890	.67350	.44180	1.52440
4.591	29.550	-10.81000	.82810	.00740	.07020	.10700	.01380	.00980	.69000	.46200	1.49340
4.591	29.830	-10.95000	.83780	.00720	.07000	.10810	.01410	.01020	.69630	.46990	1.48160
	GRADIENT	-.56880	.02221	.00059	-.00250	.00921	-.00038	.00009	.02079	-.00204	.23371

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY062) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 6.000 A-SCHD = 1.000
PHI = 45.000

RUN NO. 63/ 0 RN/L = 16.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	2.450	7.40000	-.01830	-.00620	.09360	-.11400	.00070	-.00920	-.02280	.10280	-.22170
4.591	3.450	6.42000	.00310	-.00500	.09110	-.09810	.00030	-.00910	-.00250	.09490	-.02690
4.591	4.240	5.66000	.02130	-.00420	.08940	-.08570	-.00020	-.00920	.01470	.08960	.16490
4.591	4.970	4.94000	.03770	-.00340	.08800	-.07450	-.00050	-.00900	.03020	.08720	.34680
4.591	5.720	4.20000	.05510	-.00190	.08640	-.06230	-.00080	-.00880	.04670	.08650	.54070
4.591	6.460	3.47000	.07220	-.00160	.08580	-.05200	-.00140	-.00870	.06270	.08760	.71630
4.591	7.210	2.73000	.09100	-.00010	.08460	-.04110	-.00190	-.00830	.08040	.08910	.90330
4.591	7.960	1.99000	.10820	.00150	.08360	-.03060	-.00230	-.00800	.09650	.09120	1.05790
4.591	8.710	1.24000	.12680	.00270	.08280	-.02000	-.00260	-.00760	.11380	.09420	1.20820
4.591	9.470	.50000	.14600	.00420	.08240	-.00990	-.00280	-.00710	.13170	.09820	1.34030
4.591	10.220	-.24000	.16590	.00490	.08160	-.00070	-.00280	-.00660	.15010	.10250	1.46450
4.591	10.970	-.98000	.18630	.00510	.08080	.00850	-.00270	-.00590	.16900	.10730	1.57400
4.591	11.720	-1.72000	.20790	.00550	.08010	.01810	-.00270	-.00500	.18880	.11310	1.66910
4.591	12.480	-2.47000	.22850	.00610	.07950	.02730	-.00240	-.00400	.20760	.11940	1.73790
4.591	13.240	-3.22000	.25130	.00630	.07890	.03570	-.00190	-.00300	.22840	.12660	1.80280
4.591	13.990	-3.96000	.27380	.00630	.07790	.04480	-.00150	-.00200	.24870	.13410	1.85470
4.591	14.750	-4.70000	.29710	.00620	.07700	.05330	-.00090	-.00100	.26970	.14230	1.89480
4.591	15.520	-5.44000	.32030	.00630	.07610	.06160	-.00010	-.00010	.29040	.15120	1.91980
4.591	16.280	-6.19000	.34440	.00610	.07540	.06990	.00070	.00080	.31170	.16110	1.93470
4.591	17.050	-6.93000	.36960	.00660	.07490	.07830	.00160	.00190	.33380	.17210	1.93930
4.591	17.820	-7.67000	.39460	.00670	.07460	.08660	.00260	.00290	.35530	.18380	1.93270
4.591	18.590	-8.41000	.42070	.00720	.07430	.09450	.00400	.00380	.37770	.19660	1.92030
4.591	19.360	-9.14000	.44630	.00780	.07440	.10190	.00540	.00480	.39920	.21020	1.89860
4.591	20.140	-9.87000	.47190	.00820	.07430	.10950	.00690	.00600	.42030	.22430	1.87330
4.591	20.920	-10.60000	.49740	.00880	.07450	.11750	.00820	.00730	.44110	.23920	1.84340
4.591	21.700	-11.32000	.52380	.00990	.07480	.12550	.00960	.00860	.46210	.25530	1.81010
4.591	22.480	-12.04000	.54920	.01060	.07520	.13350	.01080	.01010	.48200	.27160	1.77410
4.591	23.250	-12.75000	.57470	.01150	.07560	.14130	.01200	.01150	.50150	.28850	1.73800
4.591	24.030	-13.45000	.60030	.01250	.07610	.14840	.01350	.01300	.52070	.30610	1.70070
4.591	24.810	-14.15000	.62680	.01300	.07660	.15520	.01510	.01460	.54040	.32470	1.66380
4.591	25.560	-14.82000	.65200	.01300	.07690	.16220	.01650	.01610	.55870	.34290	1.62910
4.591	26.190	-15.38000	.67360	.01350	.07750	.16780	.01770	.01740	.57400	.35910	1.59800
	GRADIENT	-.97486	.02228	.00110	-.00223	.01569	-.00049	.00006	.02108	-.00631	.22620

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY063) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 935.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = -20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 5.000 A-SCHD = 2.000
PHI = 45.000

RUN NO. 1063/ 0 RN/L = 17.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	2.310	7.53000	-.01940	-.00660	.09370	-.11250	.00090	-.00930	-.02290	.08430	-.27170
4.591	2.730	7.13000	-.01040	-.00590	.09250	-.10550	.00060	-.00930	-.01440	.08340	-.17320
4.591	3.380	6.49000	.00570	-.00570	.09090	-.09480	.00010	-.00930	.00080	.08250	.00990
4.591	4.120	5.77000	.02230	-.00450	.08940	-.08340	-.00030	-.00910	.01650	.08220	.20070
4.591	4.870	5.03000	.03920	-.00360	.08800	-.07220	-.00070	-.00900	.03230	.08250	.39160
4.591	5.650	4.26000	.05720	-.00250	.08680	-.06050	-.00120	-.00880	.04920	.08340	.58990
4.591	6.460	3.47000	.07610	-.00150	.08560	-.04870	-.00180	-.00860	.06690	.08500	.78730
4.591	7.300	2.64000	.09550	.00000	.08450	-.03690	-.00230	-.00830	.08510	.08740	.97370
4.591	8.170	1.78000	.11700	.00130	.08380	-.02500	-.00260	-.00790	.10510	.09090	1.15600
4.591	9.030	.93000	.13830	.00250	.08290	-.01340	-.00300	-.00740	.12490	.09500	1.31460
4.591	9.890	.08000	.16090	.00370	.08210	-.00240	-.00300	-.00670	.14590	.10000	1.45960
4.591	10.770	-.79000	.18490	.00430	.08120	.00850	-.00300	-.00580	.16800	.10580	1.58740
4.591	11.650	-1.66000	.20960	.00450	.08030	.01960	-.00290	-.00480	.19080	.11250	1.69610
4.591	12.540	-2.53000	.23470	.00490	.07950	.03020	-.00250	-.00360	.21370	.12010	1.77890
4.591	13.440	-3.42000	.26180	.00490	.07870	.04070	-.00200	-.00250	.23830	.12890	1.84810
4.591	14.340	-4.30000	.28960	.00500	.07750	.05100	-.00140	-.00130	.26350	.13840	1.90320
4.591	15.240	-5.18000	.31700	.00480	.07650	.06090	-.00050	-.00010	.28800	.14880	1.93570
4.591	16.170	-6.08000	.34630	.00470	.07570	.07080	.00040	.00100	.31390	.16080	1.95180
4.591	17.090	-6.97000	.37570	.00530	.07510	.08090	.00150	.00220	.33960	.17390	1.95250
4.591	18.030	-7.87000	.40760	.00560	.07480	.09060	.00300	.00340	.36710	.18900	1.94160
4.591	19.000	-8.79000	.43980	.00640	.07470	.10000	.00480	.00460	.39430	.20560	1.91740
4.591	19.950	-9.69000	.47090	.00710	.07470	.10920	.00660	.00600	.42010	.22280	1.88540
4.591	20.920	-10.60000	.50270	.00810	.07490	.11890	.00830	.00760	.44590	.24140	1.84670
4.591	21.890	-11.50000	.53450	.00930	.07540	.12870	.00990	.00930	.47100	.26130	1.80270
4.591	22.850	-12.39000	.56580	.01030	.07590	.13840	.01140	.01110	.49520	.28180	1.75730
4.591	23.850	-13.29000	.59900	.01160	.07650	.14780	.01330	.01300	.52040	.30430	1.71020
4.591	24.780	-14.13000	.63010	.01230	.07710	.15630	.01520	.01480	.54330	.32640	1.66450
4.591	25.550	-14.81000	.65500	.01290	.07750	.16320	.01670	.01630	.56120	.34470	1.62790
4.591	26.060	-15.26000	.67150	.01300	.07790	.16740	.01760	.01720	.57270	.35730	1.60270
4.591	26.340	-15.51000	.68020	.01340	.07770	.16940	.01800	.01770	.57890	.36370	1.59130
	GRADIENT	-.97733	.02302	.00114	-.00221	.01574	-.00063	.00013	.02170	-.00070	.26132

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY064) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	-45.000		

RUN NO. 64/ 0 RN/L = 16.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	2.250	-7.50000	-.05000	.00490	.10270	.11910	-.00950	-.00420	-.05370	.09300	-.57800
4.591	3.240	-6.55000	-.02650	.00450	.09920	.10280	-.00840	-.00370	-.03160	.08980	-.35260
4.591	4.070	-5.77000	-.00480	.00450	.09620	.08910	-.00740	-.00340	-.01100	.08780	-.12600
4.591	4.810	-5.06000	.01380	.00500	.09350	.07690	-.00690	-.00340	.00660	.08640	.07650
4.591	5.570	-4.34000	.03210	.00520	.09150	.06530	-.00620	-.00320	.02380	.08630	.27670
4.591	6.320	-3.61000	.05170	.00520	.08970	.05420	-.00550	-.00330	.04230	.08690	.48740
4.591	7.080	-2.88000	.06990	.00530	.08810	.04350	-.00480	-.00350	.05950	.08810	.67540
4.591	7.840	-2.15000	.09050	.00560	.08650	.03300	-.00410	-.00370	.07900	.09010	.87660
4.591	8.590	-1.42000	.11040	.00560	.08510	.02270	-.00360	-.00410	.09770	.09270	1.05360
4.591	9.350	-.69000	.13120	.00610	.08410	.01300	-.00340	-.00460	.11710	.09630	1.21530
4.591	10.110	.03000	.15190	.00600	.08310	.00390	-.00330	-.00520	.13640	.10040	1.35830
4.591	10.870	.77000	.17380	.00570	.08200	-.00510	-.00320	-.00600	.15680	.10520	1.49020
4.591	11.630	1.50000	.19620	.00520	.08090	-.01450	-.00290	-.00690	.17750	.11070	1.60320
4.591	12.400	2.23000	.21910	.00510	.08000	-.02360	-.00270	-.00790	.19860	.11700	1.69690
4.591	13.170	2.97000	.24260	.00540	.07890	-.03190	-.00280	-.00890	.22020	.12390	1.77630
4.591	13.930	3.70000	.26720	.00430	.07740	-.04100	-.00280	-.01000	.24270	.13120	1.84900
4.591	14.710	4.44000	.29250	.00310	.07580	-.04980	-.00310	-.01100	.26560	.13930	1.90770
4.591	15.470	5.17000	.31740	.00210	.07450	-.05790	-.00360	-.01200	.28830	.14820	1.94530
4.591	16.250	5.90000	.34290	.00100	.07330	-.06590	-.00420	-.01320	.31110	.15800	1.96850
4.591	17.020	6.63000	.36940	.00050	.07250	-.07450	-.00480	-.01450	.33450	.16920	1.97710
4.591	17.800	7.36000	.39530	.00020	.07190	-.08250	-.00570	-.01570	.35700	.18090	1.97300
4.591	18.570	8.09000	.42150	.00010	.07150	-.09020	-.00680	-.01690	.37950	.19370	1.95890
4.591	19.360	8.81000	.44880	-.00010	.07140	-.09750	-.00830	-.01810	.40260	.20780	1.93760
4.591	20.150	9.54000	.47560	-.00040	.07120	-.10460	-.00970	-.01950	.42510	.22230	1.91140
4.591	20.930	10.26000	.50280	-.00030	.07110	-.11220	-.01110	-.02110	.44740	.23770	1.88160
4.591	21.720	10.98000	.53000	-.00040	.07110	-.11980	-.01240	-.02290	.46930	.25390	1.84800
4.591	22.500	11.68000	.55700	-.00050	.07110	-.12730	-.01370	-.02470	.49080	.27060	1.81360
4.591	23.290	12.39000	.58420	-.00030	.07120	-.13500	-.01500	-.02660	.51200	.28810	1.77670
4.591	24.080	13.09000	.61150	-.00040	.07140	-.14240	-.01630	-.02870	.53280	.30650	1.73790
4.591	24.850	13.77000	.63890	-.00080	.07140	-.14950	-.01760	-.03070	.55350	.32520	1.70160
4.591	25.620	14.43000	.66520	-.00150	.07170	-.15690	-.01890	-.03280	.57360	.34460	1.66430
4.591	26.300	15.02000	.69130	-.00180	.07200	-.16320	-.02020	-.03460	.59180	.36280	1.63090
	GRADIENT	.95189	.02501	.00002	-.00359	-.01649	.00104	.00032	.02365	-.00258	.25660

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY065) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	-45.000		

RUN NO. 1064/ 0 RN/L = 16.86 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	2.080	-7.66000	-.05180	.00500	.10240	.11860	-.00940	-.00420	-.05520	.09180	-.60140
4.591	2.360	-7.40000	-.04450	.00480	.10140	.11360	-.00900	-.00400	-.04830	.09080	-.53230
4.591	2.910	-6.87000	-.03080	.00440	.09940	.10390	-.00840	-.00380	-.03540	.08900	-.39780
4.591	3.640	-6.18000	-.01250	.00410	.09680	.09170	-.00770	-.00360	-.01810	.08710	-.20820
4.591	4.390	-5.46000	.00620	.00420	.09450	.07990	-.00690	-.00340	-.00030	.08600	-.00360
4.591	5.160	-4.72000	.02510	.00460	.09220	.06800	-.00620	-.00330	.01740	.08530	.20470
4.591	5.970	-3.95000	.04530	.00470	.09030	.05640	-.00550	-.00330	.03660	.08570	.42720
4.591	6.790	-3.16000	.06670	.00500	.08840	.04450	-.00470	-.00340	.05680	.08680	.65380
4.591	7.650	-2.33000	.08830	.00500	.08670	.03250	-.00400	-.00370	.07710	.08890	.86800
4.591	8.520	-1.50000	.11160	.00510	.08520	.02090	-.00340	-.00410	.09910	.09190	1.07770
4.591	9.380	-.67000	.13520	.00530	.08400	.00980	-.00310	-.00470	.12120	.09600	1.26130
4.591	10.260	.17000	.16000	.00520	.08280	-.00080	-.00300	-.00550	.14430	.10110	1.42640
4.591	11.150	1.03000	.18580	.00490	.08150	-.01160	-.00280	-.00650	.16830	.10710	1.57110
4.591	12.040	1.89000	.21290	.00490	.08030	-.02220	-.00260	-.00770	.19330	.11410	1.69300
4.591	12.950	2.76000	.24060	.00450	.07900	-.03250	-.00260	-.00880	.21870	.12210	1.79120
4.591	13.860	3.63000	.26960	.00360	.07720	-.04290	-.00260	-.01000	.24540	.13080	1.87570
4.591	14.780	4.50000	.29940	.00220	.07550	-.05290	-.00290	-.01130	.27250	.14060	1.93750
4.591	15.700	5.38000	.32980	.00080	.07390	-.06270	-.00350	-.01260	.29990	.15180	1.97600
4.591	16.630	6.27000	.36090	.00000	.07270	-.07280	-.00430	-.01400	.32750	.16440	1.99170
4.591	17.580	7.16000	.39270	-.00050	.07210	-.08240	-.00540	-.01550	.35530	.17880	1.98630
4.591	18.560	8.07000	.42680	-.00090	.07180	-.09180	-.00700	-.01700	.38460	.19540	1.96790
4.591	19.550	8.99000	.46060	-.00100	.07150	-.10080	-.00880	-.01870	.41310	.21310	1.93790
4.591	20.540	9.90000	.49460	-.00110	.07140	-.11000	-.01050	-.02060	.44120	.23200	1.90130
4.591	21.540	10.81000	.52910	-.00110	.07130	-.11940	-.01230	-.02270	.46920	.25230	1.85950
4.591	22.530	11.70000	.56340	-.00130	.07140	-.12890	-.01390	-.02500	.49650	.27360	1.81430
4.591	23.520	12.59000	.59760	-.00130	.07150	-.13810	-.01560	-.02750	.52290	.29580	1.76750
4.591	24.500	13.46000	.63280	-.00150	.07180	-.14730	-.01720	-.03010	.54970	.31970	1.71910
4.591	25.360	14.21000	.66180	-.00170	.07200	-.15510	-.01860	-.03240	.57100	.34050	1.67670
4.591	26.010	14.77000	.68460	-.00180	.07230	-.16080	-.01980	-.03410	.58750	.35720	1.64460
4.591	26.480	15.17000	.69890	-.00210	.07190	-.16480	-.02050	-.03520	.59750	.36800	1.62350
	GRADIENT	.95284	.02507	-.00037	-.00345	-.01678	.00106	.00033	.02372	-.00254	.25832

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF) (RHY066) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 72/ 0 RN/L = 15.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.650	.00000	-.06250	-.02150	.08530	-.00250	-.00030	.00000	-.06160	.07830	-.78740
4.591	.740	.00000	-.03580	-.01890	.08260	-.00280	-.00030	.00000	-.03680	.07440	-.49510
4.591	1.830	.00000	-.01500	-.01830	.08130	-.00310	-.00040	.00010	-.01730	.07290	-.23820
4.591	2.860	-.01000	.00640	-.01720	.07970	-.00290	-.00040	.00010	.00280	.07210	.03930
4.591	3.920	-.02000	.02730	-.01590	.07850	-.00270	-.00040	.00010	.02240	.07240	.30940
4.591	4.980	-.02000	.05060	-.01450	.07730	-.00310	-.00060	.00010	.04430	.07340	.60410
4.591	6.040	-.03000	.07450	-.01290	.07590	-.00280	-.00050	.00010	.06690	.07530	.88910
4.591	7.100	-.04000	.09920	-.01180	.07520	-.00250	-.00050	.00010	.09020	.07870	1.14480
4.591	8.170	-.04000	.12510	-.01050	.07410	-.00260	-.00040	.00010	.11440	.08290	1.38000
4.591	9.220	-.05000	.15210	-.00930	.07340	-.00240	-.00040	.00000	.13970	.08860	1.57640
4.591	10.300	-.06000	.18030	-.00870	.07230	-.00240	-.00030	.00000	.16590	.09510	1.74520
4.591	11.360	-.06000	.21010	-.00810	.07130	-.00220	-.00030	.00000	.19360	.10300	1.87960
4.591	12.430	-.07000	.24070	-.00790	.07070	-.00190	-.00020	.00000	.22170	.11240	1.97070
4.591	13.510	-.08000	.27270	-.00750	.06990	-.00160	-.00020	.00000	.25090	.12330	2.03420
4.591	14.590	-.08000	.30590	-.00700	.06950	-.00120	-.00010	.00000	.28070	.13590	2.06450
4.591	15.660	-.09000	.34030	-.00710	.06860	-.00070	.00000	.00000	.31150	.14950	2.08310
4.591	16.750	-.10000	.37630	-.00680	.06780	-.00050	.00000	.00000	.34330	.16500	2.08050
4.591	17.830	-.10000	.41270	-.00730	.06700	-.00010	.00000	-.00010	.37500	.18170	2.06300
4.591	18.900	-.11000	.45000	-.00770	.06610	.00010	.00000	-.00010	.40720	.20000	2.03580
4.591	19.980	-.12000	.48830	-.00830	.06540	.00040	.00000	.00000	.43950	.22000	1.99760
4.591	21.060	-.12000	.52760	-.00890	.06490	.00070	.00000	.00000	.47220	.24190	1.95140
4.591	22.130	-.13000	.56730	-.00930	.06450	.00100	.00000	.00000	.50450	.26540	1.90110
4.591	23.220	-.14000	.60890	-.01020	.06400	.00120	-.00010	.00000	.53780	.29080	1.84930
4.591	24.300	-.14000	.65040	-.01130	.06380	.00160	-.00020	.00010	.57010	.31780	1.79380
4.591	25.370	-.15000	.69280	-.01210	.06330	.00190	-.00030	.00010	.60250	.34620	1.74010
4.591	26.440	-.15000	.73630	-.01350	.06300	.00210	-.00030	.00020	.63510	.37650	1.68670
4.591	27.510	-.16000	.78140	-.01500	.06260	.00230	-.00030	.00010	.66800	.40880	1.63380
4.591	28.570	-.17000	.82600	-.01640	.06230	.00270	-.00020	.00010	.69970	.44220	1.58220
4.591	29.620	-.17000	.87090	-.01850	.06170	.00310	-.00030	.00020	.73070	.47680	1.53260
4.591	30.670	-.18000	.91520	-.02070	.06130	.00310	-.00020	.00010	.76020	.51230	1.48390
4.591	31.670	-.18000	.95920	-.02280	.06070	.00300	-.00010	.00000	.78880	.54820	1.43870
4.591	32.510	-.19000	.99620	-.02480	.06050	.00290	.00000	.00000	.81190	.57950	1.40110
	GRADIENT	-.00431	.02003	.00117	-.00140	-.00007	-.00005	.00002	.01876	-.00084	.24857

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY067) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = 15.000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 5.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1051/ 0 RN/L = 17.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-.980	.00000	-.05850	-.02870	.09770	-.00330	-.00050	-.00010	-.05700	.09020	-.63150
4.591	.030	.00000	-.03700	-.02880	.09600	-.00310	-.00050	-.00010	-.03700	.08750	-.42330
4.591	1.090	.00000	-.01420	-.02920	.09430	-.00300	-.00060	-.00010	-.01590	.08550	-.18600
4.591	2.150	.00000	.00890	-.02960	.09290	-.00290	-.00060	-.00020	.00570	.08460	.06840
4.591	3.230	-.01000	.03350	-.03010	.09150	-.00270	-.00070	-.00020	.02880	.08470	.34010
4.591	4.350	-.02000	.06040	-.03110	.09010	-.00260	-.00080	-.00020	.05410	.08590	.62960
4.591	5.520	-.03000	.09020	-.03200	.08890	-.00220	-.00090	-.00020	.08200	.08860	.92580
4.591	6.730	-.03000	.12140	-.03320	.08790	-.00210	-.00090	-.00020	.11130	.09300	1.19660
4.591	7.950	-.04000	.15490	-.03490	.08720	-.00170	-.00090	-.00020	.14260	.09930	1.43570
4.591	9.180	-.05000	.19050	-.03640	.08690	-.00140	-.00080	-.00020	.17560	.10770	1.63030
4.591	10.420	-.06000	.22690	-.03890	.08650	-.00130	-.00080	-.00020	.20900	.11770	1.77440
4.591	11.670	-.06000	.26570	-.04140	.08640	-.00110	-.00070	-.00020	.24440	.13000	1.87960
4.591	12.940	-.07000	.30620	-.04430	.08630	-.00080	-.00070	-.00020	.28100	.14440	1.94520
4.591	14.210	-.08000	.34900	-.04700	.08650	-.00040	-.00060	-.00020	.31910	.16130	1.97860
4.591	15.480	-.09000	.39400	-.05030	.08660	.00000	-.00050	-.00020	.35890	.18050	1.98790
4.591	16.770	-.10000	.43970	-.05340	.08670	.00040	-.00050	-.00020	.39840	.20180	1.97390
4.591	18.060	-.11000	.48770	-.05710	.08710	.00100	-.00040	-.00030	.43930	.22600	1.94330
4 591	19.350	-.11000	.53690	-.06080	.08760	.00150	-.00040	-.00020	.48020	.25270	1.90040
4.591	20.640	-.12000	.58730	-.06430	.08830	.00200	-.00040	-.00020	.52130	.28180	1.84950
4.591	21.970	-.13000	.64040	-.06810	.08910	.00280	-.00040	.00000	.56370	.31450	1.79190
4.591	23.300	-.14000	.69530	-.07240	.09000	.00350	-.00060	.00000	.60630	.35010	1.73180
4.591	24.620	-.14000	.75130	-.07700	.09090	.00420	-.00070	.00020	.64860	.38810	1.67110
4.591	25.960	-.15000	.80970	-.08170	.09180	.00470	-.00070	.00030	.69140	.42960	1.60940
4.591	27.280	-.16000	.86810	-.08700	.09270	.00500	-.00070	.00030	.73270	.47310	1.54880
4.591	28.620	-.17000	.92740	-.09250	.09360	.00570	-.00070	.00030	.77310	.51930	1.48880
4.591	29.950	-.17000	.98710	-.09730	.09470	.00630	-.00060	.00030	.81210	.56780	1.43020
4.591	31.120	-.18000	1.03860	-.10130	.09550	.00630	-.00050	.00020	.84400	.61150	1.38000
4.591	31.980	-.19000	1.07740	-.10440	.09630	.00640	-.00040	.00010	.86710	.64540	1.34350
4.591	32.400	-.19000	1.09430	-.10650	.09640	.00670	-.00040	.00010	.87660	.66090	1.32630
4.591	32.640	-.19000	1.10410	-.10700	.09620	.00640	-.00050	.00010	.88220	.66970	1.31720
	GRADIENT	-.00352	.02223	-.00044	-.00142	.00013	-.00006	-.00002	.02077	-.00081	.23735

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY068) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1052/ 0 RN/L = 17.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	.050	.00000	-.03710	-.02790	.09630	-.00350	.00000	.00020	-.03720	.08820	-.42230
4.591	1.120	.00000	-.01450	-.02820	.09470	-.00340	.00000	.00020	-.01620	.08630	-.18760
4.591	2.190	-.01000	.00910	-.02840	.09330	-.00330	.00000	.00020	.00590	.08550	.06920
4.591	3.270	-.01000	.03380	-.02880	.09190	-.00290	-.00010	.00030	.02890	.08550	.33860
4.591	4.400	-.02000	.06090	-.02970	.09050	-.00280	-.00020	.00030	.05440	.08670	.62700
4.591	5.580	-.03000	.09080	-.03080	.08920	-.00250	-.00030	.00030	.08250	.08950	.92190
4.591	6.770	-.04000	.12230	-.03230	.08820	-.00230	-.00030	.00020	.11200	.09390	1.19330
4.591	7.990	-.04000	.15510	-.03390	.08750	-.00210	-.00040	.00020	.14260	.10010	1.42480
4.591	9.210	-.05000	.18980	-.03610	.08700	-.00180	-.00030	.00010	.17470	.10820	1.61470
4.591	10.430	-.06000	.22580	-.03840	.08670	-.00150	-.00030	.00010	.20790	.11810	1.76000
4.591	11.660	-.07000	.26360	-.04060	.08660	-.00130	-.00020	.00010	.24230	.13010	1.86140
4.591	12.910	-.07000	.30400	-.04340	.08650	-.00090	-.00020	.00010	.27880	.14440	1.93010
4.591	14.170	-.08000	.34640	-.04660	.08650	-.00050	-.00020	.00000	.31660	.16090	1.96750
4.591	15.440	-.09000	.39030	-.04950	.08660	-.00010	-.00020	.00000	.35530	.17960	1.97790
4.591	16.720	-.10000	.43560	-.05280	.08670	.00020	-.00020	.00000	.39460	.20070	1.96560
4.591	18.010	-.11000	.48320	-.05630	.08710	.00070	-.00020	.00000	.43510	.22470	1.93620
4.591	19.300	-.11000	.53150	-.06010	.08770	.00120	-.00020	.00000	.47520	.25090	1.89370
4.591	20.600	-.12000	.58190	-.06360	.08830	.00170	-.00030	.00000	.51640	.28000	1.84410
4.591	21.930	-.13000	.63490	-.06710	.08920	.00240	-.00040	.00000	.55860	.31240	1.78770
4.591	23.260	-.14000	.68980	-.07130	.09020	.00320	-.00050	.00010	.60120	.34800	1.72730
4.591	24.600	-.14000	.74560	-.07550	.09100	.00390	-.00050	.00030	.64330	.38600	1.66670
4.591	25.960	-.15000	.80440	-.08000	.09180	.00450	-.00050	.00030	.68640	.42770	1.60470
4.591	27.320	-.16000	.86430	-.08550	.09280	.00490	-.00040	.00030	.72890	.47220	1.54370
4.591	28.690	-.17000	.92470	-.09060	.09370	.00570	-.00040	.00030	.77000	.51930	1.48270
4.591	30.040	-.18000	.98510	-.09530	.09470	.00610	-.00040	.00030	.80930	.56830	1.42390
4.591	31.210	-.18000	1.03670	-.09940	.09550	.00620	-.00030	.00030	.84110	.61230	1.37370
4.591	32.060	-.19000	1.07350	-.10230	.09620	.00640	-.00020	.00020	.86280	.64470	1.33810
4.591	32.600	-.19000	1.09660	-.10440	.09600	.00630	-.00030	.00020	.87630	.66520	1.31730
	GRADIENT	-.00462	.02252	-.00039	-.00133	.00018	-.00005	.00003	.02105	-.00034	.24198

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (RHY069) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO		
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO		
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO		
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1053/ 0 RN/L = 17.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CLM	CA	CY	CYN	CBL	CL	CD	L/D
4.591	-1.520	.01000	-.09030	-.01340	.09610	-.00420	.00000	.00020	-.08800	.09060	-.97140
4.591	-.700	.00000	-.07400	-.01300	.09420	-.00420	-.00010	.00020	-.07290	.08710	-.83710
4.591	.340	.00000	-.05310	-.01250	.09190	-.00420	-.00010	.00020	-.05360	.08360	-.64150
4.591	1.410	.00000	-.03100	-.01200	.08990	-.00410	-.00010	.00020	-.03300	.08110	-.40720
4.591	2.470	-.01000	-.00860	-.01150	.08790	-.00390	-.00010	.00020	-.01200	.07930	-.15240
4.591	3.570	-.01000	.01490	-.01060	.08590	-.00370	-.00020	.00020	.01000	.07850	.12760
4.591	4.710	-.02000	.04090	-.00970	.08380	-.00350	-.00040	.00020	.03450	.07870	.43890
4.591	5.900	-.03000	.06880	-.00910	.08180	-.00340	-.00040	.00020	.06090	.08030	.75790
4.591	7.120	-.04000	.09830	-.00850	.07990	-.00320	-.00050	.00020	.08860	.08330	1.06390
4.591	8.340	-.04000	.12940	-.00770	.07840	-.00290	-.00050	.00020	.11780	.08830	1.33450
4.591	9.560	-.05000	.16170	-.00740	.07700	-.00260	-.00050	.00010	.14800	.09470	1.56350
4.591	10.810	-.06000	.19640	-.00750	.07570	-.00240	-.00040	.00000	.18030	.10310	1.74840
4.591	12.050	-.07000	.23250	-.00750	.07440	-.00190	-.00030	.00000	.21350	.11330	1.88310
4.591	13.310	-.08000	.27010	-.00800	.07330	-.00140	-.00030	.00000	.24790	.12560	1.97240
4.591	14.580	-.09000	.30970	-.00800	.07220	-.00100	-.00030	.00000	.28350	.14010	2.02380
4.591	15.860	-.09000	.35140	-.00810	.07100	-.00050	-.00020	.00000	.32080	.15650	2.04870
4.591	17.140	-.10000	.39450	-.00820	.06980	.00000	-.00010	.00000	.35880	.17520	2.04740
4.591	18.430	-.11000	.43920	-.00850	.06870	.00040	.00000	.00000	.39740	.19640	2.02320
4.591	19.710	-.12000	.48500	-.00890	.06800	.00090	.00000	.00000	.43630	.22000	1.98300
4.591	21.000	-.12000	.53280	-.00980	.06730	.00150	.00000	.00000	.47610	.24640	1.93220
4.591	22.330	-.13000	.58220	-.01120	.06670	.00210	-.00020	.00010	.51620	.27560	1.87320
4.591	23.650	-.14000	.63320	-.01250	.06600	.00280	-.00030	.00020	.55660	.30720	1.81160
4.591	24.980	-.15000	.68610	-.01410	.06510	.00360	-.00040	.00030	.59770	.34170	1.74910
4.591	26.330	-.15000	.74020	-.01590	.06420	.00420	-.00050	.00030	.63840	.37890	1.68470
4.591	27.670	-.16000	.79630	-.01810	.06330	.00450	-.00040	.00030	.67940	.41910	1.62110
4.591	29.040	-.17000	.85370	-.02000	.06250	.00510	-.00040	.00030	.71980	.46240	1.55660
4.591	30.370	-.18000	.90980	-.02250	.06190	.00530	-.00030	.00030	.75750	.50670	1.49490
4.591	31.470	-.18000	.95690	-.02430	.06140	.00520	-.00010	.00020	.78810	.54530	1.44510
4.591	32.220	-.19000	.98780	-.02560	.06120	.00530	.00000	.00020	.80710	.57200	1.41110
4.591	32.680	-.19000	1.00600	-.02640	.06050	.00520	-.00010	.00010	.81830	.58760	1.39260
	GRADIENT	-.00408	.02099	.00058	-.00196	.00012	-.00005	.00000	.01960	-.00192	.22714

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY001) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 53/ 0 RN/L = 16.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.460	.00000	-.00010	-.00010	.00680	.08570	-.04240	-.04510
4.591	1.800	.00000	-.00010	.00010	.00690	.08310	-.04290	-.04550
4.591	2.920	-.01000	-.00010	.00020	.00700	.08030	-.04380	-.04590
4.591	3.930	-.02000	-.00020	.00020	.00700	.07840	-.04350	-.04650
4.591	4.960	-.02000	-.00040	.00020	.00710	.07640	-.04470	-.04670
4.591	6.020	-.03000	-.00060	.00020	.00720	.07450	-.04520	-.04720
4.591	7.070	-.04000	-.00030	.00020	.00730	.07290	-.04610	-.04780
4.591	8.110	-.04000	-.00040	.00010	.00740	.07140	-.04680	-.04870
4.591	9.160	-.05000	-.00040	.00000	.00750	.07030	-.04730	-.04900
4.591	10.220	-.06000	-.00030	.00000	.00760	.06880	-.04790	-.04970
4.591	11.270	-.06000	-.00030	.00000	.00770	.06760	-.04840	-.05020
4.591	12.320	-.07000	-.00020	.00000	.00780	.06660	-.04890	-.05050
4.591	13.380	-.08000	-.00030	.00000	.00790	.06550	-.04940	-.05110
4.591	14.450	-.08000	-.00020	.00000	.00790	.06460	-.04990	-.05160
4.591	15.510	-.09000	-.00020	.00000	.00800	.06360	-.05020	-.05180
4.591	16.570	-.10000	.00000	.00000	.00800	.06240	-.05070	-.05190
4.591	17.640	-.10000	.00000	.00000	.00810	.06150	-.05090	-.05210
4.591	18.700	-.11000	.00000	.00000	.00800	.06070	-.05090	-.05190
4.591	19.770	-.12000	.00000	.00000	.00810	.05990	-.05100	-.05190
4.591	20.820	-.12000	.00000	.00000	.00810	.05940	-.05100	-.05230
4.591	21.890	-.13000	.00000	.00000	.00810	.05890	-.05120	-.05240
4.591	22.960	-.14000	-.00010	.00000	.00810	.05830	-.05130	-.05260
4.591	24.020	-.14000	-.00030	.00000	.00820	.05780	-.05150	-.05280
4.591	25.080	-.15000	-.00050	.00000	.00820	.05710	-.05170	-.05260
4.591	26.140	-.15000	-.00060	.00000	.00820	.05630	-.05170	-.05280
4.591	27.190	-.16000	-.00050	.00000	.00820	.05560	-.05150	-.05280
4.591	28.230	-.17000	-.00040	.00000	.00820	.05490	-.05170	-.05240
4.591	29.280	-.17000	-.00050	.00000	.00810	.05430	-.05120	-.05210
4.591	30.300	-.18000	-.00050	.00000	.00800	.05360	-.05090	-.05190
4.591	31.320	-.18000	-.00030	.00010	.00800	.05300	-.05050	-.05140
4.591	32.250	-.19100	-.00010	.00000	.00790	.05280	-.04990	-.05070
	GRADIENT	-.00533	-.00006	.00006	.00006	-.00209	-.00050	-.00038

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY002) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 54/ 0 RN/L = 16.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.290	.00000	.00000	.00000	.00620	.08700	-.03860	-.04180
4.591	1.590	.00000	.00000	.00020	.00640	.08390	-.04010	-.04280
4.591	2.900	-.01000	-.00010	.00020	.00660	.08080	-.04150	-.04370
4.591	4.010	-.02000	-.00010	.00030	.00680	.07890	-.04230	-.04420
4.591	5.160	-.02000	-.00030	.00030	.00690	.07650	-.04320	-.04490
4.591	6.310	-.03000	-.00040	.00010	.00700	.07420	-.04410	-.04580
4.591	7.450	-.04000	-.00040	.00020	.00710	.07260	-.04480	-.04620
4.591	8.620	-.05000	-.00030	.00010	.00720	.07120	-.04560	-.04690
4.591	9.770	-.05000	-.00020	.00010	.00730	.06980	-.04630	-.04740
4.591	10.930	-.06000	-.00020	.00010	.00750	.06820	-.04710	-.04850
4.591	12.090	-.07000	-.00030	.00010	.00750	.06700	-.04760	-.04880
4.591	13.260	-.08000	-.00020	.00000	.00760	.06580	-.04820	-.04940
4.591	14.430	-.08000	-.00020	.00000	.00770	.06490	-.04890	-.04990
4.591	15.600	-.09000	-.00010	.00000	.00780	.06370	-.04940	-.05020
4.591	16.780	-.10000	.00000	.00000	.00790	.06240	-.04990	-.05040
4.591	17.940	-.11000	.00000	.00000	.00790	.06140	-.05000	-.05050
4.591	19.120	-.11000	.00000	.00000	.00790	.06050	-.05020	-.05070
4.591	20.290	-.12000	.00000	.00000	.00790	.05980	-.05020	-.05070
4.591	21.460	-.13000	.00000	.00000	.00800	.05910	-.05090	-.05090
4.591	22.640	-.13000	-.00020	.00000	.00800	.05850	-.05090	-.05140
4.591	23.810	-.14000	-.00030	.00010	.00800	.05800	-.05100	-.05140
4.591	24.980	-.15000	-.00050	.00010	.00810	.05730	-.05120	-.05160
4.591	26.150	-.15000	-.00070	.00000	.00810	.05650	-.05130	-.05160
4.591	27.310	-.16000	-.00060	.00000	.00810	.05560	-.05120	-.05160
4.591	28.470	-.17000	-.00050	.00000	.00800	.05490	-.05120	-.05120
4.591	29.620	-.17000	-.00060	.00000	.00800	.05410	-.05070	-.05120
4.591	30.760	-.18000	-.00040	.00000	.00790	.05340	-.05050	-.05040
4.591	31.850	-.19000	-.00020	.00000	.00790	.05290	-.05000	-.05020
4.591	32.620	-.19000	-.00010	.00000	.00780	.05280	-.04950	-.04950
	GRADIENT	-.00556	-.00003	.00007	.00016	-.00220	-.00101	-.00065

ORIGINAL PAGE IS OF POOR QUALITY

LT"-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY003) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1054/ 0 RN/L = 17.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.670	.00000	.00000	.00020	.00780	.08350	-.04970	-.04880
4.591	1.700	.00000	.00000	.00020	.00780	.08160	-.05010	-.04880
4.591	2.780	-.01000	-.00010	.00020	.00790	.07940	-.05040	-.04970
4.591	3.840	-.02000	-.00010	.00020	.00800	.07740	-.05090	-.05040
4.591	4.910	-.02000	-.00030	.00020	.00800	.07550	-.05130	-.05080
4.591	6.000	-.03000	-.00040	.00020	.00810	.07360	-.05140	-.05110
4.591	7.100	-.04000	-.00040	.00020	.00810	.07190	-.05180	-.05170
4.591	8.210	-.04000	-.00050	.00010	.00810	.07050	-.05190	-.05170
4.591	9.340	-.05000	-.00040	.00010	.00820	.06900	-.05230	-.05190
4.591	10.480	-.06000	-.00040	.00000	.00820	.06780	-.05230	-.05190
4.591	11.610	-.06000	-.00030	.00000	.00820	.06660	-.05230	-.05200
4.591	12.770	-.07000	-.00030	.00000	.00820	.06560	-.05230	-.05220
4.591	13.950	-.08000	-.00030	.00000	.00820	.06460	-.05200	-.05190
4.591	15.120	-.09000	-.00030	.00000	.00810	.06350	-.05180	-.05170
4.591	16.320	-.09000	-.00020	.00000	.00810	.06230	-.05180	-.05170
4.591	17.510	-.10000	-.00010	.00000	.00810	.06130	-.05160	-.05170
4.591	18.730	-.11000	-.00010	.00000	.00810	.06040	-.05150	-.05140
4.591	19.940	-.12000	.00000	.00000	.00810	.05970	-.05150	-.05140
4.591	21.170	-.12000	-.00010	.00000	.00800	.05910	-.05120	-.05120
4.591	22.400	-.13000	-.00020	.00000	.00800	.05860	-.05080	-.05100
4.591	23.640	-.14000	-.00030	.00000	.00790	.05800	-.05030	-.05050
4.591	24.900	-.15000	-.00050	.00010	.00780	.05750	-.04980	-.04980
4.591	26.180	-.15000	-.00060	.00010	.00780	.05650	-.04940	-.04950
4.591	27.460	-.16000	-.00060	.00010	.00770	.05580	-.04920	-.04900
4.591	28.650	-.17000	-.00060	.00010	.00770	.05500	-.04870	-.04880
4.591	30.000	-.18000	-.00050	.00010	.00760	.05410	-.04840	-.04860
4.591	31.650	-.18000	-.00020	.00010	.00760	.05340	-.04850	-.04880
4.591	32.610	-.19000	-.00020	.00000	.00770	.05260	-.04920	-.04900
	GRADIENT	-.00566	-.00007	.00000	.00006	-.00190	- 00038	-.00053

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY004) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 55/ 0 RN/L = 15.59 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.150	.00000	-.00010	.00000	.00660	.08630	-.04120	-.04420
4.591	.410	.00000	-.00020	.00010	.00670	.08550	-.04150	-.04430
4.591	1.230	.00000	-.00030	.00010	.00670	.08370	-.04160	-.04430
4.591	2.410	-.01000	-.00030	.00010	.00670	.08150	-.04200	-.04460
4.591	3.680	-.02000	-.00040	.00020	.00680	.07910	-.04220	-.04480
4.591	4.940	-.02000	-.00050	.00020	.00680	.07690	-.04270	-.04490
4.591	6.180	-.03000	-.00050	.00030	.00690	.07480	-.04290	-.04530
4.591	7.430	-.04000	-.00060	.00020	.00690	.07290	-.04340	-.04570
4.591	8.680	-.05000	-.00050	.00020	.00700	.07120	-.04390	-.04640
4.591	9.930	-.05000	-.00040	.00010	.00710	.06960	-.04440	-.04670
4.591	11.180	-.06000	-.00040	.00000	.00720	.06820	-.04470	-.04710
4.591	12.440	-.07000	-.00040	.00000	.00720	.06700	-.04490	-.04760
4.591	13.700	-.08000	-.00030	.00000	.00730	.06580	-.04560	-.04790
4.591	14.970	-.09000	-.00020	.00000	.00730	.06460	-.04590	-.04830
4.591	16.250	-.10000	-.00010	.00000	.00750	.06330	- 04670	-.04880
4.591	17.520	-.10000	.00000	.00000	.00750	.06220	-.04690	-.04910
4.591	18.800	-.11000	-.00010	.00000	.00750	.06120	-.04720	-.04930
4.591	20.080	-.12000	-.00010	.00000	.00760	.06040	-.04750	-.04950
4.591	21.360	-.13000	-.00020	.00000	.00760	.05960	-.04770	-.04970
4.591	22.650	-.13000	-.00030	.00000	.00760	.05900	-.04790	-.05000
4.591	23.940	-.14000	-.00050	.00000	.00760	.05830	-.04770	-.05000
4.591	25.230	-.15000	-.00070	.00000	.00770	.05750	-.04820	-.05020
4.591	26.510	-.16000	-.00070	.00000	.00770	.05660	-.04820	-.05050
4.591	27.790	-.16000	-.00070	.00000	.00770	.05570	-.04850	-.05030
4.591	29.070	-.17000	-.00070	.00000	.00780	.05470	-.04870	-.05050
4.591	30.320	-.18000	-.00050	.00000	.00770	.05400	-.04820	-.05020
4.591	31.390	-.18000	-.00040	.00000	.00770	.05380	-.04820	-.05000
4.591	32.050	-.19000	-.00030	.00000	.00760	.05360	-.04800	-.04970
4.591	32.290	-.19000	-.00030	.00000	.00760	.05320	-.04790	-.04950
	GRADIENT	-.00496	-.00007	.00004	.00004	-.00194	-.00028	-.00015

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY005) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = .000 AILRON = .000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = 25.000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1055/ 0 RN/L = 16.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.110	.00000	-.00020	.00020	.00750	.08550	-.04780	-.04820
4.591	.820	.00000	-.00020	.00020	.00760	.08360	-.04820	-.04880
4.591	1.790	.00000	-.00020	.00020	.00770	.08170	-.04850	-.04910
4.591	2.770	-.01000	-.00030	.00020	.00770	.07980	-.04900	-.04950
4.591	3.760	-.02000	-.00040	.00020	.00780	.07790	-.04950	-.05000
4.591	4.750	-.02000	-.00050	.00020	.00790	.07600	-.04980	-.05050
4.591	5.770	-.03000	-.00060	.00020	.00790	.07430	-.05010	-.05120
4.591	6.780	-.03000	-.00060	.00020	.00800	.07260	-.05030	-.05140
4.591	7.820	-.04000	-.00060	.00010	.00800	.07120	-.05070	-.05150
4.591	8.870	-.05000	-.00060	.00010	.00800	.06990	-.05080	-.05190
4.591	9.910	-.05000	-.00050	.00000	.00810	.06870	-.05100	-.05190
4.591	10.960	-.06000	-.00050	.00000	.00810	.06760	-.05100	-.05210
4.591	12.030	-.07000	-.00040	.00000	.00800	.06650	-.05080	-.05190
4.591	13.120	-.07000	-.00040	.00000	.00800	.06560	-.05080	-.05170
4.591	14.210	-.08000	-.00040	.00000	.00800	.06470	-.05030	-.05170
4.591	15.300	-.09000	-.00030	-.00010	.00800	.06370	-.05030	-.05150
4.591	16.420	-.10000	-.00020	-.00010	.00790	.06270	-.05000	-.05140
4.591	17.530	-.10000	-.00020	-.00010	.00790	.06170	-.05000	-.05150
4.591	18.660	-.11000	-.00020	-.00010	.00790	.06090	-.05000	-.05150
4.591	19.790	-.12000	-.00010	-.00010	.00790	.06030	-.05000	-.05120
4.591	20.930	-.12000	-.00020	.00000	.00790	.05960	-.04970	-.05100
4.591	22.080	-.13000	-.00030	.00000	.00780	.05920	-.04950	-.05070
4.591	23.230	-.14000	-.00050	.00000	.00780	.05870	-.04900	-.05030
4.591	24.410	-.14000	-.00060	.00000	.00770	.05810	-.04820	-.05000
4.591	25.570	-.15000	-.00070	.00000	.00760	.05730	-.04790	-.04950
4.591	26.760	-.16000	-.00070	.00000	.00760	.05640	-.04750	-.04910
4.591	27.950	-.16000	-.00060	.00000	.00750	.05580	-.04720	-.04860
4.591	29.080	-.17000	-.00070	.00000	.00740	.05490	-.04670	-.04860
4.591	30.400	-.18000	-.00050	.00000	.00740	.05410	-.04670	-.04830
4.591	31.760	-.18000	-.00030	.00000	.00750	.05360	-.04700	-.04830
4.591	32.300	-.19000	-.00030	.00000	.00750	.05320	-.04720	-.04880
	GRADIENT	-.00500	-.00006	.00000	.00008	-.00195	-.00042	-.00045

L-V-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY006) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 56/ 0 RN/L = 15.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.580	.00000	-.00030	.00030	.00640	.08610	-.03970	-.04210
4.591	1.940	.00000	-.00010	.00020	.00650	.08390	-.04040	-.04250
4.591	3.060	-.01000	-.00020	.00010	.00650	.08090	-.04100	-.04310
4.591	4.090	-.02000	-.00020	.00020	.00660	.07860	-.04160	-.04330
4.591	5.170	-.02000	-.00040	.00030	.00670	.07640	-.04210	-.04380
4.591	6.230	-.03000	-.00040	.00020	.00680	.07450	-.04280	-.04430
4.591	7.310	-.04000	-.00060	.00010	.00690	.07290	-.04350	-.04500
4.591	8.390	-.04000	-.00050	.00010	.00700	.07160	-.04380	-.04570
4.591	9.470	-.05000	-.00050	.00010	.00710	.07020	-.04440	-.04640
4.591	10.550	-.06000	-.00040	.00000	.00720	.06880	-.04510	-.04680
4.591	11.630	-.07000	-.00040	.00000	.00730	.06760	-.04580	-.04760
4.591	12.700	-.07000	-.00030	.00000	.00740	.06650	-.04660	-.04780
4.591	13.790	-.08000	-.00030	.00000	.00740	.06560	-.04660	-.04810
4.591	14.890	-.09000	-.00020	.00000	.00750	.06460	-.04740	-.04880
4.591	15.970	-.09000	-.00010	.00000	.00760	.06350	-.04770	-.04920
4.591	17.060	-.10000	-.00010	.00000	.00760	.06250	-.04790	-.04920
4.591	18.150	-.11000	-.00010	.00000	.00760	.06160	-.04820	-.04930
4.591	19.240	-.11000	.00000	.00000	.00760	.06070	-.04820	-.04930
4.591	20.330	-.12000	.00000	.00000	.00760	.06010	-.04820	-.04920
4.591	21.430	-.13000	-.00010	.00000	.00770	.05950	-.04850	-.04930
4.591	22.520	-.13000	-.00020	.00000	.00770	.05910	-.04840	-.04930
4.591	23.600	-.14000	-.00050	.00000	.00770	.05850	-.04890	-.04980
4.591	24.690	-.14000	-.00060	.00000	.00770	.05770	-.04900	-.04980
4.591	25.770	-.15000	-.00080	.00000	.00780	.05680	-.04920	-.05000
4.591	26.860	-.16000	-.00080	.00000	.00780	.05600	-.04920	-.05000
4.591	27.930	-.16000	-.00060	.00000	.00770	.05540	-.04990	-.04950
4.591	29.000	-.17000	-.00060	.00000	.00770	.05470	-.04850	-.04950
4.591	30.060	-.17000	-.00070	.00000	.00770	.05400	-.04850	-.04920
4.591	31.100	-.18000	-.00050	.00000	.00760	.05350	-.04800	-.04880
4.591	32.100	-.19000	-.00030	-.00010	.00750	.05310	-.04770	-.04830
4.591	32.660	-.19000	-.00030	-.00010	.00740	.05290	-.04720	-.04780
	GRADIENT	-.00585	.00002	-.00004	.00005	-.00218	-.00054	-.00036

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY007) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1056/ 0 RN/L = 16.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-1.500	.01000	-.00020	.00030	.00750	.08850	-.04750	-.04740
4.591	-.690	.00000	-.00030	.00020	.00750	.08660	-.04750	-.04770
4.591	.360	.00000	-.00020	.00020	.00750	.08430	-.04790	-.04810
4.591	1.440	.00000	-.00020	.00020	.00760	.08210	-.04830	-.04830
4.591	2.530	-.01000	-.00030	.00020	.00760	.08000	-.04850	-.04880
4.591	3.650	-.01000	-.00040	.00020	.00770	.07790	-.04880	-.04930
4.591	4.790	-.02000	-.00060	.00020	.00770	.07590	-.04880	-.04930
4.591	5.980	-.03000	-.00070	.00020	.00770	.07380	-.04920	-.04950
4.591	7.200	-.04000	-.00070	.00010	.00770	.07210	-.04920	-.04960
4.591	8.420	-.04000	-.00060	.00010	.00780	.07050	-.04930	-.04960
4.591	9.650	-.05000	-.00060	.00000	.00780	.06910	-.04930	-.04980
4.591	10.900	-.06000	-.00050	.00000	.00770	.06780	-.04900	-.04960
4.591	12.140	-.07000	-.00050	.00000	.00770	.06650	-.04920	-.04960
4.591	13.410	-.08000	-.00040	.00000	.00770	.06540	-.04880	-.04930
4.591	14.680	-.08000	-.00040	.00000	.00770	.06440	-.04850	-.04930
4.591	15.950	-.09000	-.00020	-.00010	.00760	.06330	-.04840	-.04910
4.591	17.240	-.10000	-.00010	-.00010	.00760	.06210	-.04840	-.04910
4.591	18.550	-.11000	-.00010	-.00010	.00760	.06110	-.04800	-.04880
4.591	19.850	-.12000	-.00010	-.00010	.00760	.06030	-.04800	-.04860
4.591	21.160	-.12000	-.00020	.00000	.00760	.05970	-.04780	-.04860
4.591	22.500	-.13000	-.00040	.00000	.00750	.05910	-.04740	-.04810
4.591	23.840	-.14000	-.00060	.00000	.00750	.05830	-.04720	-.04790
4.591	25.190	-.15000	-.00070	.00000	.00740	.05740	-.04670	-.04720
4.591	26.550	-.16000	-.00070	.00000	.00730	.05660	-.04640	-.04720
4.591	27.900	-.16000	-.00070	.00000	.00730	.05560	-.04650	-.04690
4.591	29.260	-.17000	-.00060	.00000	.00730	.05480	-.04650	-.04720
4.591	30.550	-.18000	-.00050	.00000	.00730	.05430	-.04640	-.04710
4.591	31.610	-.18000	-.00040	.00000	.00730	.05380	-.04620	-.04690
4.591	32.290	-.19000	-.00030	.00000	.00730	.05370	-.04620	-.04710
4.591	32.670	-.19000	-.00030	-.00010	.00740	.05300	-.04690	-.04740
	GRADIENT	-.00403	-.00005	-.00001	.00004	-.00200	-.00024	-.00032

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (8WVFO) (AHY008) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 347 0 RN/L = 17.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-2.570	.02000	-.00040	.00000	.00710	.09060	-.04500	-.04520
4.591	-1.160	.01000	-.00040	.00000	.00720	.08650	-.04600	-.04570
4.591	-.060	.00000	-.00040	.00000	.00730	.08350	-.04650	-.04590
4.591	.950	.00000	-.00030	-.00010	.00730	.08140	-.04650	-.04650
4.591	2.000	-.01000	-.00040	-.00010	.00740	.07980	-.04700	-.04650
4.591	3.050	-.01000	-.00030	-.00010	.00740	.07800	-.04730	-.04680
4.591	4.100	-.02000	-.00030	-.00020	.00750	.07600	-.04780	-.04710
4.591	5.150	-.02000	-.00050	-.00020	.00750	.07430	-.04820	-.04780
4.591	6.210	-.03000	-.00050	-.00020	.00760	.07250	-.04860	-.04780
4.591	7.270	-.04000	-.00040	-.00020	.00770	.07080	-.04910	-.04870
4.591	8.340	-.05000	-.00030	-.00020	.00780	.06950	-.04980	-.04900
4.591	9.410	-.05000	-.00030	-.00020	.00790	.06830	-.05030	-.04970
4.591	10.480	-.06000	-.00020	-.00020	.00790	.06710	-.05060	-.04990
4.591	11.550	-.07000	-.00020	-.00030	.00800	.06600	-.05110	-.05060
4.591	12.620	-.07000	-.00030	-.00030	.00810	.06490	-.05180	-.05110
4.591	13.680	-.08000	-.00030	-.00030	.00810	.06390	-.05190	-.05130
4.591	14.750	-.09000	-.00020	-.00040	.00820	.06300	-.05230	-.05140
4.591	15.820	-.09000	-.00010	-.00040	.00820	.06210	-.05260	-.05160
4.591	16.900	-.10000	-.00010	-.00040	.00820	.06120	-.05280	-.05200
4.591	17.970	-.11000	-.00010	-.00040	.00830	.06040	-.05280	-.05210
4.591	19.060	-.11000	-.00010	-.00040	.00820	.05990	-.05280	-.05190
4.591	20.140	-.12000	-.00010	-.00040	.00830	.05910	-.05310	-.05210
4.591	21.220	-.13000	-.00020	-.00040	.00830	.05850	-.05310	-.05190
4.591	22.290	-.13000	-.00020	-.00030	.00830	.05790	-.05330	-.05210
4.591	23.370	-.14000	-.00030	-.00030	.00830	.05750	-.05330	-.05200
4.591	24.450	-.14000	-.00040	-.00020	.00830	.05710	-.05330	-.05200
4.591	25.520	-.15000	-.00040	-.00020	.00830	.05660	-.05290	-.05200
4.591	26.580	-.16000	-.00040	-.00020	.00820	.05600	-.05290	-.05160
4.591	27.660	-.16000	-.00040	-.00020	.00820	.05530	-.05290	-.05160
4.591	28.720	-.17000	-.00050	-.00020	.00820	.05470	-.05280	-.05160
4.591	29.760	-.17000	-.00060	-.00020	.00820	.05410	-.05280	-.05140
4.591	30.790	-.18000	-.00050	-.00020	.00820	.05370	-.05230	-.05120
4.591	31.780	-.19000	-.00030	-.00020	.00810	.05350	-.05190	-.05090
4.591	32.560	-.19000	-.00020	-.00020	.00810	.05340	-.05180	-.05070
	GRADIENT	-.00560	.00002	-.00003	.00006	-.00213	-.00038	-.00028

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY009) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 35/ 0 RN/L = 17.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.700	.00000	-.00030	-.00010	.00700	.08380	-.04420	-.04550
4.591	2.170	-.01000	-.00060	-.00010	.00710	.08010	-.04470	-.04570
4.591	3.530	-.01000	-.00060	-.00010	.00710	.07710	-.04490	-.04630
4.591	4.790	-.02000	-.00060	-.00010	.00720	.07470	-.04550	-.04660
4.591	6.070	-.03000	-.00070	-.00020	.00730	.07240	-.04620	-.04700
4.591	7.370	-.04000	-.00060	-.00020	.00740	.07080	-.04680	-.04760
4.591	8.670	-.05000	-.00050	-.00010	.00750	.06950	-.04750	-.04800
4.591	9.970	-.06000	-.00040	-.00020	.00760	.06790	-.04800	-.04870
4.591	11.280	-.06000	-.00040	-.00030	.00770	.06660	-.04880	-.04920
4.591	12.580	-.07000	-.00040	-.00030	.00780	.06520	-.04940	-.05000
4.591	13.870	-.08000	-.00030	-.00040	.00780	.06410	-.04980	-.05020
4.591	15.190	-.09000	-.00030	-.00040	.00790	.06310	-.05010	-.05060
4.591	16.500	-.10000	-.00030	-.00040	.00800	.06180	-.05060	-.05090
4.591	17.820	-.10000	-.00020	-.00040	.00800	.06090	-.05060	-.05090
4.591	19.130	-.11000	-.00020	-.00040	.00800	.06000	-.05080	-.05090
4.591	20.450	-.12000	-.00020	-.00040	.00800	.05910	-.05080	-.05110
4.591	21.770	-.13000	-.00030	-.00040	.00800	.05840	-.05110	-.05120
4.591	23.090	-.14000	-.00040	-.00040	.00800	.05780	-.05110	-.05140
4.591	24.400	-.14000	-.00060	-.00030	.00800	.05740	-.05110	-.05140
4.591	25.710	-.15000	-.00070	-.00030	.00800	.05670	-.05090	-.05110
4.591	27.030	-.16000	-.00060	-.00030	.00800	.05600	-.05110	-.05110
4.591	28.330	-.17000	-.00060	-.00030	.00800	.05520	-.05080	-.05110
4.591	29.610	-.17000	-.00070	-.00030	.00800	.05420	-.05080	-.05090
4.591	30.900	-.18000	-.00060	-.00030	.00800	.05380	-.05060	-.05070
4.591	32.110	-.19000	-.00030	-.00030	.00790	.05350	-.05010	-.05070
4.591	32.740	-.19000	-.00030	-.00030	.00790	.05330	-.05030	-.05060
	GRADIENT	-.00440	-.00007	-.00000	.00004	-.00223	-.00030	-.00029

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY010) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1035/ 0 RN/L = 18.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.330	.00000	-.00040	-.00010	.00790	.08250	-.05060	-.05020
4.591	1.300	.00000	-.00040	-.00010	.00800	.08060	-.05090	-.05030
4.591	2.460	-.01000	-.00050	-.00020	.00800	.07840	-.05120	-.05070
4.591	3.610	-.01000	-.00060	-.00020	.00810	.07610	-.05160	-.05100
4.591	4.790	-.02000	-.00070	-.00020	.00820	.07380	-.05220	-.05170
4.591	5.990	-.03000	-.00070	-.00030	.00820	.07190	-.05260	-.05170
4.591	7.210	-.04000	-.00060	-.00030	.00820	.07030	-.05260	-.05210
4.591	8.470	-.05000	-.00060	-.00030	.00830	.06880	-.05270	-.05230
4.591	9.710	-.05000	-.00040	-.00030	.00830	.06730	-.05290	-.05240
4.591	10.990	-.06000	-.00040	-.00030	.00830	.06610	-.05260	-.05240
4.591	12.270	-.07000	-.00040	-.00040	.00830	.06490	-.05260	-.05240
4.591	13.560	-.08000	-.00050	-.00040	.00820	.06380	-.05220	-.05190
4.591	14.850	-.09000	-.00040	-.00040	.00810	.06280	-.05190	-.05170
4.591	16.170	-.09000	-.00040	-.00050	.00810	.06170	-.05190	-.05140
4.591	17.520	-.10000	-.00040	-.00040	.00810	.06060	-.05190	-.05160
4.591	18.850	-.11000	-.00030	-.00050	.00810	.05990	-.05170	-.05140
4.591	20.210	-.12000	-.00030	-.00050	.00810	.05900	-.05140	-.05120
4.591	21.590	-.13000	-.00040	-.00050	.00800	.05850	-.05140	-.05090
4.591	22.950	-.13000	-.00050	-.00040	.00800	.05780	-.05110	-.05090
4.591	24.340	-.14000	-.00060	-.00030	.00800	.05740	-.05080	-.05110
4.591	25.760	-.15000	-.00060	-.00020	.00790	.05670	-.05060	-.05050
4.591	27.190	-.16000	-.00060	-.00020	.00790	.05600	-.05010	-.05040
4.591	28.480	-.17000	-.00060	-.00020	.00780	.05510	-.04980	-.05020
4.591	30.070	-.18000	-.00070	-.00020	.00790	.05420	-.04990	-.05040
4.591	31.840	-.19000	-.00040	-.00020	.00790	.05390	-.05010	-.05040
4.591	32.580	-.19000	-.00030	-.00020	.00790	.05310	-.05010	-.05040
	GRADIENT	-.00448	-.00007	-.00003	.00006	-.00195	-.00035	-.00033

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY011) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 37/ 0 RN/L = 16.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.390	.00000	-.00050	.00000	.00720	.08360	-.04500	-.04690
4.591	.710	.00000	-.00040	.00000	.00720	.08320	-.04530	-.04720
4.591	1.600	.00000	-.00040	.00000	.00720	.08190	-.04550	-.04720
4.591	2.810	-.01000	-.00040	.00000	.00730	.07970	-.04570	-.04740
4.591	4.070	-.02000	-.00030	-.00010	.00730	.07720	-.04600	-.04750
4.591	5.330	-.03000	-.00030	-.00010	.00740	.07490	-.04640	-.04780
4.591	6.590	-.04000	-.00020	-.00010	.00740	.07270	-.04650	-.04840
4.591	7.840	-.04000	-.00030	-.00010	.00750	.07100	-.04690	-.04870
4.591	9.100	-.05000	-.00040	-.00010	.00750	.06950	-.04740	-.04870
4.591	10.350	-.06000	-.00040	-.00010	.00760	.06810	-.04770	-.04920
4.591	11.620	-.07000	-.00050	-.00010	.00760	.06660	-.04800	-.04990
4.591	12.870	-.07000	-.00050	-.00020	.00770	.06520	-.04850	-.05010
4.591	14.120	-.08000	-.00030	-.00010	.00780	.06420	-.04900	-.05040
4.591	15.400	-.09000	-.00010	-.00010	.00780	.06340	-.04930	-.05070
4.591	16.680	-.10000	.00000	-.00020	.00790	.06220	-.04960	-.05110
4.591	17.950	-.11000	.00000	-.00030	.00790	.06120	-.04980	-.05130
4.591	19.240	-.11000	-.00010	-.00030	.00790	.06030	-.05010	-.05130
4.591	20.530	-.12000	-.00010	-.00040	.00790	.05950	-.05010	-.05140
4.591	21.810	-.13000	-.00020	-.00040	.00800	.05880	-.05050	-.05160
4.591	23.100	-.14000	-.00040	-.00030	.00800	.05830	-.05040	-.05140
4.591	24.380	-.14000	-.00050	-.00020	.00800	.05780	-.05060	-.05160
4.591	25.660	-.15000	-.00060	-.00010	.00800	.05700	-.05060	-.05180
4.591	26.960	-.16000	-.00060	-.00010	.00800	.05630	-.05080	-.05160
4.591	28.240	-.17000	-.00070	-.00020	.00800	.05540	-.05060	-.05160
4.591	29.490	-.17000	-.00070	-.00020	.00800	.05450	-.05080	-.05160
4.591	30.690	-.18000	-.00050	-.00020	.00800	.05450	-.05050	-.05130
4.591	31 600	-.19000	-.00040	-.00020	.00800	.05440	-.05030	-.05130
4.591	32.080	-.19000	-.00030	-.00020	.00790	.05400	-.05010	-.05130
	GRADIENT	-.00558	.00004	-.00002	.00003	-.00174	-.00024	-.00014

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY012) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1037/ 0 RN/L = 17.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.330	.00000	-.00040	.00000	.00800	.08290	-.05070	-.05090
4.591	.970	.00000	-.00040	.00000	.00800	.08160	-.05110	-.05100
4.591	1.760	.00000	-.00040	-.00010	.00810	.08010	-.05140	-.05120
4.591	2.590	-.01000	-.00050	-.00010	.00810	.07850	-.05160	-.05190
4.591	3.410	-.01000	-.00050	-.00010	.00820	.07700	-.05190	-.05210
4.591	4.250	-.02000	-.00060	-.00010	.00820	.07540	-.05240	-.05260
4.591	5.110	-.02000	-.00060	-.00010	.00830	.07390	-.05270	-.05300
4.591	5.970	-.03000	-.00060	-.00020	.00830	.07240	-.05310	-.05310
4.591	6.840	-.03000	-.00050	-.00020	.00840	.07120	-.05320	-.05350
4.591	7.750	-.04000	-.00050	-.00020	.00840	.07020	-.05320	-.05350
4.591	8.650	-.05000	-.00050	-.00020	.00850	.06930	-.05370	-.05400
4.591	9 560	-.05000	-.00040	-.00020	.00850	.06840	-.05390	-.05400
4.591	10.470	-.06000	-.00040	-.00020	.00850	.06730	-.05370	-.05400
4.591	11.370	-.06000	-.00040	-.00030	.00840	.06630	-.05360	-.05400
4.591	12.330	-.07000	-.00040	-.00030	.00840	.06520	-.05320	-.05370
4.591	13.260	-.08000	-.00040	-.00030	.00840	.06430	-.05310	-.05380
4.591	14.200	-.08000	-.00040	-.00030	.00830	.06370	-.05290	-.05310
4.591	15.150	-.09000	-.00030	-.00030	.00830	.06290	-.05280	-.05300
4.591	16.110	-.09000	-.00020	-.00030	.00830	.06210	-.05240	-.05300
4.591	17.090	-.10000	-.00020	-.00040	.00830	.06120	-.05240	-.05300
4.591	18.060	-.11000	-.00020	-.00040	.00820	.06060	-.05240	-.05260
4.591	19.040	-.11000	-.00020	-.00040	.00820	.06010	-.05210	-.05250
4.591	20.030	-.12000	-.00020	-.00040	.00820	.05940	-.05190	-.05250
4.591	21.040	-.12000	-.00020	-.00040	.00820	.05890	-.05180	-.05210
4.591	22.050	-.13000	-.00030	-.00040	.00810	.05840	-.05110	-.05210
4.591	23.030	-.14000	-.00040	-.00030	.00810	.05810	-.05130	-.05210
4.591	24.060	-.14000	-.00050	-.00020	.00810	.05780	-.05110	-.05160
4.591	25.090	-.15000	-.00060	-.00010	.00800	.05740	-.05080	-.05130
4.591	26.110	-.15000	-.00060	-.00010	.00800	.05670	-.05080	-.05120
4.591	27.150	-.16000	-.00050	-.00010	.00790	.05610	-.05030	-.05090
4.591	28.160	-.17000	-.00060	-.00010	.00790	.05540	-.04980	-.05070
4.591	29.180	-.17000	-.00080	-.00010	.00790	.05470	-.04960	-.05110
4.591	30.300	-.18000	-.00050	-.00020	.00790	.05420	-.04980	-.05110
4.591	31.490	-.18000	-.00040	-.00010	.00790	.05400	-.05000	-.05110
4.591	32.210	-.19000	-.00030	-.00020	.00790	.05380	-.05000	-.05130
	GRADIENT	-.00511	-.00005	-.00003	.00006	-.00191	-.00040	-.00045

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (AHY013) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 38/ 0 RN/L = 16.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB /	CPC
4.591	.550	.00000	-.00060	.00000	.00750	.08320	-.04710	-.04880
4.591	1.800	.00000	-.00060	-.00010	.00750	.08080	-.04730	-.04880
4.591	2.750	-.01000	-.00060	-.00010	.00760	.07910	-.04770	-.04920
4.591	3.670	-.01000	-.00070	-.00010	.00760	.07740	-.04800	-.04920
4.591	4.600	-.02000	-.00080	-.00010	.00770	.07570	-.04850	-.04970
4.591	5.540	-.03000	-.00090	-.00020	.00770	.07400	-.04900	-.04990
4.591	6.480	-.03000	-.00080	-.00020	.00780	.07240	-.04930	-.05040
4.591	7.410	-.04000	-.00080	-.00020	.00790	.07120	-.04960	-.05090
4.591	8.370	-.04000	-.00080	-.00020	.00800	.07000	-.05050	-.05140
4.591	9.300	-.05000	-.00070	-.00020	.00800	.06900	-.05080	-.05160
4.591	10.240	-.06000	-.00060	-.00030	.00810	.06790	-.05130	-.05230
4.591	11.180	-.06000	-.00060	-.00030	.00820	.06690	-.05180	-.05260
4.591	12.130	-.07000	-.00060	-.00030	.00820	.06590	-.05210	-.05320
4.591	13.080	-.07000	-.00060	-.00030	.00830	.06500	-.05260	-.05350
4.591	14.030	-.08000	-.00050	-.00030	.00840	.06420	-.05280	-.05380
4.591	14.980	-.09000	-.00050	-.00030	.00840	.06330	-.05330	-.05420
4.591	15.930	-.09000	-.00030	-.00030	.00840	.06240	-.05340	-.05440
4.591	16.890	-.10000	-.00030	-.00030	.00850	.06160	-.05360	-.05420
4.591	17.840	-.11000	-.00020	-.00030	.00840	.06080	-.05340	-.05420
4.591	18.790	-.11000	-.00020	-.00040	.00840	.06020	-.05340	-.05420
4.591	19.740	-.12000	-.00010	-.00040	.00850	.05950	-.05360	-.05420
4.591	20.690	-.12000	-.00010	-.00040	.00850	.05890	-.05370	-.05440
4.591	21.640	-.13000	-.00020	-.00030	.00850	.05840	-.05360	-.05420
4.591	22.600	-.13000	-.00030	-.00030	.00850	.05790	-.05390	-.05420
4.591	23.550	-.14000	-.00050	-.00020	.00850	.05770	-.05360	-.05420
4.591	24.490	-.14000	-.00060	-.00020	.00840	.05730	-.05360	-.05400
4.591	25.440	-.15000	-.00070	-.00020	.00850	.05670	-.05360	-.05420
4.591	26.390	-.16000	-.00070	-.00020	.00840	.05620	-.05340	-.05380
4.591	27.320	-.16000	-.00080	-.00020	.00840	.05560	-.05360	-.05380
4.591	28.240	-.17000	-.00080	-.00020	.00840	.05510	-.05340	-.05350
4.591	29.180	-.17000	-.00090	-.00020	.00840	.05450	-.05340	-.05330
4.591	30.090	-.18000	-.00080	-.00020	.00840	.05400	-.05310	-.05330
4.591	30.990	-.18000	-.00060	-.00020	.00830	.05390	-.05260	-.05300
4.591	31.870	-.19000	-.00040	-.00020	.00830	.05370	-.05260	-.05280
4.591	32.560	-.19000	-.00040	-.00020	.00830	.05350	-.05240	-.05280
	GRADIENT	-.00493	-.00005	-.00002	.00005	-.00185	-.00035	-.00022

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY014) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1038/ 0 RN/L = 17.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.290	.00000	-.00070	.00000	.00830	.08300	-.05290	-.05260
4.591	.730	.00000	-.00070	-.00010	.00830	.08220	-.05290	-.05280
4.591	1.520	.00000	-.00070	-.00010	.00830	.08060	-.05320	-.05290
4.591	2.520	-.01000	-.00080	-.00010	.00840	.07860	-.05350	-.05330
4.591	3.590	-.01000	-.00080	-.00020	.00840	.07650	-.05370	-.05350
4.591	4.730	-.02000	-.00090	-.00020	.00850	.07450	-.05400	-.05400
4.591	5.890	-.03000	-.00100	-.00020	.00850	.07260	-.05400	-.05420
4.591	7.090	-.04000	-.00090	-.00030	.00850	.07090	-.05400	-.05420
4.591	8.300	-.04000	-.00080	-.00030	.00850	.06940	-.05400	-.05420
4.591	9.510	-.05000	-.00080	-.00030	.00850	.06810	-.05400	-.05420
4.591	10.750	-.06000	-.00070	-.00030	.00850	.06680	-.05400	-.05420
4.591	11.990	-.07000	-.00070	-.00030	.00850	.06570	-.05390	-.05380
4.591	13.240	-.08000	-.00060	-.00030	.00840	.06460	-.05370	-.05380
4.591	14.510	-.08000	-.00060	-.00030	.00840	.06350	-.05360	-.05380
4.591	15.790	-.09000	-.00040	-.00040	.00840	.06240	-.05340	-.05350
4.591	17.070	-.10000	-.00030	-.00040	.00840	.06130	-.05320	-.05350
4.591	18.360	-.11000	-.00020	-.00040	.00840	.06040	-.05310	-.05330
4.591	19.660	-.12000	-.00020	-.00040	.00830	.05960	-.05290	-.05330
4.591	20.970	-.12000	-.00020	-.00040	.00830	.05880	-.05270	-.05290
4.591	22.310	-.13000	-.00040	-.00030	.00830	.05830	-.05260	-.05290
4.591	23.650	-.14000	-.00050	-.00020	.00830	.05770	-.05240	-.05280
4.591	24.980	-.15000	-.00070	-.00010	.00820	.05700	-.05240	-.05260
4.591	26.330	-.16000	-.00080	-.00010	.00820	.05630	-.05220	-.05260
4.591	27.650	-.16000	-.00080	-.00010	.00820	.05550	-.05210	-.05240
4.591	29.000	-.17000	-.00080	-.00010	.00820	.05480	-.05210	-.05240
4.591	30.320	-.18000	-.00070	-.00010	.00820	.05430	-.05210	-.05240
4.591	31.450	-.18000	-.00050	-.00010	.00820	.05400	-.05220	-.05260
4.591	32.270	-.19000	-.00040	-.00020	.00820	.05400	-.05210	-.05240
4.591	32.640	-.19000	-.00050	-.00020	.00820	.05380	-.05220	-.05240
	GRADIENT	-.00452	-.00005	-.00004	.00005	-.00194	-.00026	-.00030

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY015) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 71/ 0 RN/L = 15.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.680	.00000	.00000	.00010	.00770	.08500	.10410	-.04900
4.591	.750	.00000	-.00010	.00010	.00780	.08170	.10570	-.04940
4.591	1.830	-.01000	-.00010	.00000	.00780	.07980	.11000	-.04940
4.591	2.870	-.01000	-.00010	.00000	.00780	.07780	.10760	-.04970
4.591	3.930	-.02000	-.00050	.00010	.00780	.07600	.07850	-.04970
4.591	4.980	-.02000	-.00050	.00010	.00780	.07420	.04540	-.04990
4.591	6.040	-.03000	-.00060	.00000	.00800	.07240	.03080	-.05060
4.591	7.110	-.04000	-.00050	.00000	.00800	.07080	.02950	-.05100
4.591	8.170	-.04000	-.00050	.00000	.00810	.06920	.03070	-.05170
4.591	9.230	-.05000	-.00050	.00000	.00820	.06800	.03170	-.05220
4.591	10.300	-.06000	-.00050	.00000	.00830	.06680	.03250	-.05250
4.591	11.360	-.06000	-.00040	.00000	.00830	.06570	.02580	-.05300
4.591	12.430	-.07000	-.00040	.00000	.00840	.06460	.01740	-.05350
4.591	13.520	-.08000	-.00030	-.00010	.00840	.06380	.01340	-.05370
4.591	14.590	-.08000	-.00030	-.00010	.00850	.06300	.00640	-.05420
4.591	15.670	-.09000	-.00020	-.00010	.00860	.06210	.00290	-.05470
4.591	16.750	-.10000	-.00010	-.00010	.00870	.06120	.00250	-.05510
4.591	17.830	-.10000	.00000	-.00010	.00870	.06020	-.00030	-.05530
4.591	18.920	-.11000	.00000	-.00010	.00870	.05920	-.00480	-.05560
4.591	19.990	-.12000	.00000	-.00010	.00870	.05840	-.00940	-.05560
4.591	21.070	-.12000	.00000	.00000	.00870	.05780	-.01250	-.05560
4.591	22.150	-.13000	-.00010	.00000	.00870	.05730	-.01400	-.05560
4.591	23.230	-.14000	-.00030	.00000	.00870	.05660	-.01370	-.05560
4.591	24.300	-.14000	-.00040	.00000	.00870	.05620	-.01150	-.05510
4.591	25.380	-.15000	-.00050	.00000	.00860	.05550	-.00890	-.05490
4.591	26.450	-.15000	-.00050	.00000	.00860	.05500	-.00570	-.05470
4.591	27.520	-.16000	-.00040	.00000	.00850	.05450	-.00240	-.05440
4.591	28.580	-.17000	-.00040	.00000	.00840	.05410	-.00080	-.05370
4.591	29.630	-.17000	-.00050	.00000	.00840	.05350	.00000	-.05370
4.591	30.670	-.18000	-.00020	.00000	.00840	.05310	.00130	-.05320
4.591	31.680	-.18000	.00000	.00000	.00830	.05240	.00210	-.05280
4.591	32.530	-.19000	.00000	.00000	.00830	.05220	.00640	-.05270
	GRADIENT	-.00408	-.00009	-.00000	.00001	-.00189	-.00941	-.00015

LTV 44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY016) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 70/ 0 RN/L = 14.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.710	.00000	-.00010	.00030	.00750	.08570	.07520	-.04800
4.591	-.100	.00000	-.00020	.00020	.00760	.08370	.07500	-.04820
4.591	.990	.00000	-.00020	.00020	.00760	.08130	.07590	-.04860
4.591	2.240	-.01000	-.00020	.00020	.00760	.07900	.07850	-.04850
4.591	3.500	-.01000	-.00030	.00010	.00760	.07720	.07530	-.04820
4.591	4.730	-.02000	-.00040	.00010	.00770	.07520	.06260	-.04900
4.591	5.950	-.03000	-.00040	.00010	.00760	.07300	.04540	-.04870
4.591	7.210	-.04000	-.00040	.00010	.00770	.07090	.03250	-.04910
4.591	8.470	-.05000	-.00040	.00010	.00780	.06910	.02850	-.04970
4.591	9.730	-.05000	-.00040	.00000	.00790	.06760	.02930	-.05010
4.591	10.980	-.06000	-.00040	.00000	.00790	.06630	.03050	-.05040
4.591	12.250	-.07000	-.00030	.00000	.00800	.06510	.02830	-.05100
4.591	13.520	-.08000	-.00020	.00000	.00810	.06400	.02300	-.05130
4.591	14.790	-.09000	-.00010	.00000	.00810	.06300	.01480	-.05170
4.591	16.060	-.09000	-.00010	.00000	.00810	.06200	.00570	-.05180
4.591	17.340	-.10000	.00000	.00000	.00820	.06080	-.00140	-.05240
4.591	18.620	-.11000	.00000	.00000	.00830	.05980	-.00630	-.05250
4.591	19.890	-.12000	.00000	.00000	.00830	.05870	-.01010	-.05300
4.591	21.180	-.12000	.00000	.00000	.00840	.05790	-.01280	-.05320
4.591	22.460	-.13000	-.00020	.00000	.00840	.05710	-.01420	-.05340
4.591	23.750	-.14000	-.00040	.00000	.00840	.05640	-.01410	-.05360
4.591	25.040	-.15000	-.00050	.00000	.00840	.05580	-.01210	-.05340
4.591	26.320	-.15000	-.00050	.00000	.00840	.05510	-.00860	-.05320
4.591	27.600	-.16000	-.00040	.00000	.00840	.05440	-.00460	-.05320
4.591	28.880	-.17000	-.00040	.00000	.00830	.05380	-.00080	-.05290
4.591	30.110	-.17000	-.00030	.00000	.00830	.05330	.00190	-.05290
4.591	31.180	-.18000	-.00020	.00000	.00820	.05320	.00350	-.05230
4.591	31.860	-.18000	.00000	.00000	.00820	.05280	.00430	-.05230
4.591	32.140	-.19000	.00000	.00000	.00820	.05250	.00530	-.05200
	GRADIENT	-.00364	-.00005	-.00003	.00002	-.00187	-.00161	-.00012

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY017) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1070/ 0 RN/L = 16.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC-
4.591	-.910	.00000	-.00020	.00020	.00800	.08500	.07220	-.05090
4.591	-.210	.00000	-.00020	.00020	.00800	.08340	.07250	-.05110
4.591	.670	.00000	-.00020	.00020	.00810	.08150	.07780	-.05160
4.591	1.600	.00000	-.00020	.00010	.00820	.07980	.08110	-.05200
4.591	2.560	-.01000	-.00030	.00010	.00820	.07790	.07270	-.05250
4.591	3.530	-.01000	-.00040	.00010	.00830	.07610	.05780	-.05300
4.591	4.500	-.02000	-.00050	.00010	.00840	.07440	.03390	-.05350
4.591	5.490	-.03000	-.00060	.00010	.00850	.07260	.02320	-.05390
4.591	6.500	-.03000	-.00060	.00010	.00850	.07090	.02450	-.05440
4.591	7.500	-.04000	-.00060	.00010	.00860	.06950	.02860	-.05470
4.591	8.530	-.04000	-.00060	.00000	.00860	.06820	.03060	-.05490
4.591	9.560	-.05000	-.00050	.00000	.00870	.06710	.03180	-.05510
4.591	10.600	-.06000	-.00050	.00000	.00870	.06600	.02750	-.05510
4.591	11.650	-.06000	-.00040	.00000	.00870	.06510	.02070	-.05510
4.591	12.710	-.07000	-.00030	.00000	.00870	.06420	.01290	-.05530
4.591	13.790	-.08000	-.00030	.00000	.00860	.06340	.00290	-.05490
4.591	14.880	-.09000	-.00030	-.00010	.00860	.06260	-.00490	-.05470
4.591	15.960	-.09000	-.00020	-.00010	.00850	.06180	-.00810	-.05420
4.591	17.060	-.10000	-.00010	-.00010	.00850	.06090	-.01040	-.05420
4.591	18.170	-.11000	.00000	.00000	.00840	.06000	-.01400	-.05370
4.591	19.290	-.11000	.00000	.00000	.00840	.05910	-.01630	-.05350
4.591	20.400	-.12000	.00000	.00000	.00840	.05850	-.01580	-.05320
4.591	21.540	-.13000	-.00010	.00000	.00830	.05790	-.01400	-.05250
4.591	22.670	-.13000	-.00020	.00000	.00820	.05720	-.01150	-.05230
4.591	23.820	-.14000	-.00040	.00000	.00820	.05680	-.00830	-.05200
4.591	24.980	-.15000	-.00050	.00000	.00810	.05610	-.00430	-.05160
4.591	26.150	-.15000	-.00050	.00000	.00810	.05550	-.00120	-.05160
4.591	27.320	-.16000	-.00040	.00000	.00810	.05490	.00140	-.05150
4.591	28.460	-.17000	-.00040	.00000	.00810	.05420	.00280	-.05150
4.591	29.660	-.17000	-.00040	.00000	.00800	.05360	.00400	-.05110
4.591	31.040	-.18000	-.00010	.00000	.00810	.05310	.00530	-.05150
4.591	32.040	-.18000	.00000	.00000	.00810	.05270	.00830	-.05150
	GRADIENT	-.00357	-.00006	-.00002	.00007	-.00195	-.00598	-.00049

DATE 21 JAN 76 TABULATED SOURCE DATA - LA58

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY

REFERENCE DATA PARAMETR

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN. XO	ELEVON =	.000
LREF =	474.8100 INCHES	YMRP =	.0000 IN. YO	SPDBRK =	55.000
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN. ZO	LWGRIT =	.000
SCALE =	.0150			A-RATE =	6.000
				PHI =	.000

RUN NO. 69/ 0 RN/L = 15.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	C
4.591	-.730	.00000	-.00050	.00010	.00750	.08530	.08240	-.
4.591	.640	.00000	-.00040	.00020	.00770	.08200	.07840	-.
4.591	1.760	.00000	-.00030	.00010	.00770	.07970	.07890	-.
4.591	2.790	-.01000	-.00030	.00010	.00770	.07810	.08020	-.
4.591	3.840	-.02000	-.00020	.00010	.00770	.07640	.07620	-.
4.591	4.900	-.02000	-.00040	.00010	.00780	.07430	.06280	-.
4.591	5.960	-.03000	-.00050	.00010	.00780	.07230	.04900	-.
4.591	7.020	-.04000	-.00040	.00010	.00800	.07060	.03610	-.
4.591	8.080	-.04000	-.00040	.00000	.00800	.06940	.02710	-.
4.591	9.160	-.05000	-.00050	.00000	.00810	.06810	.02920	-.
4.591	10.220	-.06000	-.00040	.00000	.00810	.06690	.03210	-.
4.591	11.300	-.06000	-.00040	.00000	.00830	.06580	.03200	-.
4.591	12.360	-.07000	-.00030	.00000	.00830	.06480	.02770	-.
4.591	13.430	-.08000	-.00030	.00000	.00840	.06380	.02290	-.
4.591	14.510	-.08000	-.00020	.00000	.00840	.06300	.01540	-.
4.591	15.590	-.09000	-.00010	.00000	.00860	.06210	.00810	-.
4.591	16.670	-.10000	.00000	.00000	.00860	.06110	.00800	-.
4.591	17.750	-.10000	.00000	.00000	.00860	.06020	.00630	-.
4.591	18.830	-.11000	.00000	.00000	.00870	.05920	.00160	-.
4.591	19.910	-.12000	.00000	.00000	.00870	.05850	-.00400	-.
4.591	21.000	-.12000	.00000	.00000	.00870	.05790	-.00900	-.
4.591	22.070	-.13000	.00000	.00000	.00870	.05730	-.01170	-.
4.591	23.150	-.14000	-.00020	.00000	.00870	.05660	-.01250	-.
4.591	24.230	-.14000	-.00030	.00000	.00870	.05620	-.01070	-.
4.591	25.300	-.15000	-.00050	.00000	.00860	.05550	-.00790	-.
4.591	26.370	-.15000	-.00050	.00000	.00850	.05500	-.00450	-.
4.591	27.450	-.16000	-.00040	.00000	.00850	.05440	-.00130	-.
4.591	28.500	-.17000	-.00040	.00000	.00840	.05390	.00130	-.
4.591	29.550	-.17000	-.00040	.00000	.00840	.05340	.00290	-.
4.591	30.590	-.18000	-.00020	.00000	.00830	.05290	.00340	-.
4.591	31.610	-.18000	.00000	.00000	.00830	.05240	.00330	-.
4.591	32.480	-.19000	.00000	.00000	.00820	.05220	.00840	-.
	GRADIENT	-.00430	.00003	-.00001	.00004	-.00190	-.00263	-.

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY019) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1069/ 0 RN/L = 16.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.910	.00000	-.00020	.00020	.00820	.08460	.07320	-.05250
4.591	-.380	.00000	-.00020	.00010	.00830	.08330	.07590	-.05280
4.591	.510	.00000	-.00020	.00010	.00840	.08130	.08060	-.05330
4.591	1.540	.00000	-.00020	.00010	.00840	.07930	.08170	-.05370
4.591	2.620	-.01000	-.00030	.00010	.00850	.07730	.07120	-.05400
4.591	3.720	-.01000	-.00040	.00010	.00850	.07530	.05040	-.05420
4.591	4.860	-.02000	-.00050	.00010	.00860	.07320	.03280	-.05450
4.591	6.040	-.03000	-.00060	.00000	.00860	.07120	.02800	-.05470
4.591	7.250	-.04000	-.00060	.00000	.00870	.06950	.03110	-.05510
4.591	8.470	-.04000	-.00050	.00000	.00870	.06810	.03360	-.05510
4.591	9.700	-.05000	-.00050	.00000	.00860	.06680	.03320	-.05490
4.591	10.950	-.06000	-.00040	.00000	.00860	.06560	.02790	-.05490
4.591	12.190	-.07000	-.00040	.00000	.00860	.06450	.02030	-.05460
4.591	13.450	-.08000	-.00030	.00000	.00850	.06360	.01420	-.05440
4.591	14.730	-.08000	-.00020	-.00010	.00850	.06270	.00990	-.05420
4.591	16.000	-.09000	-.00010	-.00010	.00840	.06170	.00500	-.05370
4.591	17.290	-.10000	.00000	-.00010	.00840	.06060	-.00150	-.05370
4.591	18.600	-.11000	.00000	-.00010	.00840	.05960	-.00750	-.05330
4.591	19.900	-.12000	.00000	.00000	.00830	.05870	-.01040	-.05300
4.591	21.220	-.12000	.00000	.00000	.00830	.05800	-.00960	-.05260
4.591	22.570	-.13000	-.00020	.00000	.00820	.05730	-.00750	-.05250
4.591	23.910	-.14000	-.00030	.00000	.00820	.05650	-.00420	-.05250
4.591	25.260	-.15000	-.00040	.00000	.00820	.05580	-.00100	-.05210
4.591	26.630	-.15000	-.00040	.00000	.00820	.05510	.00110	-.05210
4.591	27.970	-.16000	-.00040	.00000	.00820	.05430	.00300	-.05210
4.591	29.330	-.17000	-.00030	.00000	.00810	.05370	.00490	-.05180
4.591	30.620	-.18000	-.00020	.00000	.00820	.05330	.00630	-.05210
4.591	31.680	-.18000	.00000	.00000	.00820	.05280	.01430	-.05210
4.591	32.430	-.19000	.00000	.00000	.00820	.05260	.01900	-.05210
4.591	32.710	-.19000	.00000	.00000	.00820	.05230	.01880	-.05210
	GRADIENT	-.00336	-.00005	-.00001	.00006	-.00195	-.00695	-.00034

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY020) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 58/ 0 RN/L = 15.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.180	.00000	.00510	.00880	-.00140	.10620	.03990	-.04690
4.591	.680	-.01000	.00490	.00860	-.00130	.10470	.03950	-.04700
4.591	1.680	-.01000	.00450	.00810	-.00070	.10140	.03370	-.04700
4.591	2.920	-.02000	.00380	.00790	.00090	.09650	.01730	-.04730
4.591	4.180	-.03000	.00300	.00770	.00260	.09190	.00080	-.04780
4.591	5.440	-.03000	.00240	.00750	.00390	.08770	-.01220	-.04840
4.591	6.680	-.04000	.00200	.00730	.00480	.08420	-.02100	-.04890
4.591	7.930	-.05000	.00180	.00710	.00550	.08130	-.02720	-.04920
4.591	9.180	-.06000	.00160	.00690	.00600	.07880	-.03190	-.04980
4.591	10.430	-.07000	.00140	.00690	.00640	.07660	-.03540	-.05030
4.591	11.690	-.07000	.00110	.00690	.00670	.07480	-.03800	-.05080
4.591	12.950	-.08000	.00080	.00690	.00700	.07300	-.04030	-.05140
4.591	14.220	-.09000	.00060	.00690	.00720	.07140	-.04220	-.05170
4.591	15.490	-.10000	.00010	.00680	.00730	.06970	-.04380	-.05220
4.591	16.770	-.10000	-.00020	.00690	.00750	.06820	-.04530	-.05260
4.591	18.050	-.11000	-.00060	.00690	.00760	.06680	-.04630	-.05290
4.591	19.330	-.12000	-.00110	.00700	.00780	.06550	-.04730	-.05310
4.591	20.610	-.13000	-.00150	.00710	.00780	.06430	-.04790	-.05320
4.591	21.900	-.13000	-.00200	.00740	.00790	.06330	-.04860	-.05340
4.591	23.190	-.14000	-.00260	.00760	.00800	.06240	-.04920	-.05360
4.591	24.470	-.15000	-.00320	.00790	.00810	.06140	-.04990	-.05380
4.591	25.760	-.15000	-.00380	.00810	.00810	.06030	-.05010	-.05380
4.591	27.050	-.16000	-.00430	.00830	.00810	.05940	-.05040	-.05380
4.591	28.330	-.17000	-.00480	.00850	.00810	.05850	-.05070	-.05380
4.591	29.610	-.18000	-.00520	.00880	.00820	.05770	-.05110	-.05380
4.591	30.800	-.18000	-.00560	.00900	.00810	.05710	-.05090	-.05360
4.591	31.680	-.19000	-.00590	.00920	.00820	.05660	-.05120	-.05380
4.591	32.140	-.19000	-.00610	.00930	.00820	.05620	-.05120	-.05360
	GRADIENT	-.00675	-.00052	-.00027	.00102	-.00361	-.01011	-.00021

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY021) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1058/ 0 RN/L = 16.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.960	.00000	.00560	.00910	.00550	.10200	-.02590	-.05080
4.591	-.400	.00000	.00530	.00890	.00660	.09910	-.03650	-.05180
4.591	.460	-.01000	.00500	.00850	.00800	.09520	-.05000	-.05230
4.591	1.380	-.01000	.00450	.00820	.00820	.09260	-.05170	-.05300
4.591	2.330	-.02000	.00400	.00790	.00830	.09000	-.05270	-.05360
4.591	3.290	-.02000	.00360	.00770	.00840	.08750	-.05370	-.05370
4.591	4.270	-.03000	.00310	.00760	.00850	.08500	-.05430	-.05440
4.591	5.250	-.03000	.00250	.00740	.00860	.08280	-.05470	-.05500
4.591	6.240	-.04000	.00210	.00720	.00870	.08060	-.05520	-.05510
4.591	7.250	-.05000	.00180	.00720	.00870	.07880	-.05550	-.05550
4.591	8.270	-.05000	.00160	.00710	.00870	.07730	-.05570	-.05560
4.591	9.300	-.06000	.00140	.00700	.00880	.07580	-.05580	-.05560
4.591	10.340	-.06000	.00130	.00700	.00880	.07440	-.05580	-.05580
4.591	11.380	-.07000	.00120	.00690	.00880	.07310	-.05580	-.05580
4.591	12.430	-.08000	.00090	.00690	.00870	.07190	-.05570	-.05560
4.591	13.510	-.08000	.00060	.00690	.00870	.07070	-.05520	-.05550
4.591	14.580	-.09000	.00020	.00690	.00860	.06950	-.05480	-.05530
4.591	15.670	-.10000	.00000	.00690	.00860	.06810	-.05450	-.05500
4.591	16.760	-.10000	-.00030	.00690	.00860	.06680	-.05450	-.05500
4.591	17.870	-.11000	-.00060	.00700	.00850	.06580	-.05400	-.05480
4.591	18.980	-.12000	-.00100	.00700	.00850	.06460	-.05400	-.05460
4.591	20.100	-.12000	-.00140	.00710	.00850	.06360	-.05400	-.05460
4.591	21.220	-.13000	-.00180	.00730	.00850	.06290	-.05370	-.05430
4.591	22.360	-.14000	-.00230	.00750	.00840	.06230	-.05340	-.05410
4.591	23.510	-.14000	-.00280	.00780	.00840	.06160	-.05320	-.05380
4.591	24.660	-.15000	-.00340	.00800	.00830	.06060	-.05290	-.05360
4.591	25.820	-.15000	-.00390	.00820	.00830	.05970	-.05250	-.05320
4.591	26.990	-.16000	-.00430	.00840	.00830	.05910	-.05220	-.05320
4.591	28.150	-.17000	-.00470	.00860	.00820	.05850	-.05200	-.05270
4.591	29.300	-.17000	-.00520	.00880	.00820	.05770	-.05170	-.05250
4.591	30.640	-.18000	-.00560	.00910	.00820	.05690	-.05150	-.05250
4.591	31.880	-.19000	-.00600	.00930	.00810	.05630	-.05120	-.05270
4.591	32.270	-.19000	-.00620	.00930	.00810	.05580	-.05120	-.05290
	GRADIENT	-.00563	-.00048	-.00030	.00050	-.00316	-.00471	-.00063

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY022) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 57/ 0 RN/L = 15.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.350	-.01000	.00530	.00840	.00490	.09880	-.02580	-.04180
4.591	1.630	-.02000	.00460	.00820	.00480	.09540	-.02440	-.04220
4.591	2.820	-.02000	.00410	.00790	.00550	.09190	-.03050	-.04280
4.591	3.850	-.03000	.00380	.00760	.00600	.08930	-.03500	-.04330
4.591	4.920	-.03000	.00300	.00750	.00630	.08600	-.03780	-.04410
4.591	5.990	-.04000	.00230	.00740	.00650	.08340	-.03970	-.04480
4.591	7.060	-.05000	.00230	.00720	.00670	.08140	-.04140	-.04540
4.591	8.140	-.05000	.00190	.00720	.00690	.07960	-.04270	-.04590
4.591	9.210	-.06000	.00160	.00710	.00700	.07790	-.04380	-.04680
4.591	10.290	-.06000	.00150	.00700	.00710	.07620	-.04460	-.04710
4.591	11.370	-.07000	.00140	.00700	.00730	.07470	-.04560	-.04780
4.591	12.450	-.08000	.00110	.00700	.00740	.07340	-.04610	-.04850
4.591	13.540	-.08000	.00080	.00710	.00750	.07200	-.04730	-.04880
4.591	14.630	-.09000	.00040	.00710	.00760	.07060	-.04760	-.04950
4.591	15.720	-.10000	.00010	.00710	.00770	.06900	-.04830	-.04950
4.591	16.810	-.10000	-.00010	.00710	.00770	.06770	-.04890	-.04990
4.591	17.900	-.11000	-.00050	.00720	.00770	.06660	-.04890	-.05000
4.591	19.000	-.12000	-.00090	.00720	.00780	.06540	-.04910	-.05000
4.591	20.080	-.12000	-.00120	.00730	.00780	.06450	-.04930	-.05020
4.591	21.170	-.13000	-.00160	.00750	.00780	.06360	-.04930	-.05020
4.591	22.270	-.14000	-.00210	.00760	.00780	.06300	-.04940	-.05040
4.591	23.360	-.14000	-.00260	.00790	.00780	.06240	-.04970	-.05020
4.591	24.440	-.15000	-.00330	.00810	.00780	.06150	-.04970	-.05040
4.591	25.530	-.15000	-.00380	.00830	.00780	.06050	-.04970	-.05040
4.591	26.610	-.16000	-.00420	.00840	.00780	.05970	-.04970	-.05020
4.591	27.690	-.16000	-.00450	.00860	.00780	.05910	-.04940	-.05000
4.591	28.760	-.17000	-.00490	.00880	.00780	.05840	-.04920	-.05000
4.591	29.820	-.18000	-.00540	.00900	.00780	.05760	-.04910	-.04980
4.591	30.880	-.18000	-.00570	.00930	.00770	.05690	-.04910	-.04950
4.591	31.890	-.19000	-.00610	.00940	.00770	.05620	-.04890	-.04930
4.591	32.630	-.19000	-.00640	.00960	.00770	.05590	-.04880	-.04900
	GRADIENT	-.00441	-.00048	-.00021	.00035	-.00279	-.00301	-.00050

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY023) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1057/ 0 RN/L = 16.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-1.500	.00000	.00610	.00930	.00730	.10170	-.04520	-.04790
4.591	-.680	.00000	.00560	.00900	.00750	.09880	-.04720	-.04820
4.591	.370	-.01000	.00510	.00860	.00770	.09550	-.04870	-.04880
4.591	1.450	-.01000	.00450	.00820	.00770	.09260	-.04920	-.04930
4.591	2.530	-.02000	.00400	.00790	.00780	.08970	-.04990	-.04960
4.591	3.650	-.03000	.00340	.00770	.00780	.08700	-.04990	-.04980
4.591	4.790	-.03000	.00280	.00750	.00790	.08430	-.05000	-.05000
4.591	5.980	-.04000	.00230	.00730	.00790	.08170	-.05020	-.05050
4.591	7.210	-.05000	.00190	.00720	.00790	.07940	-.05040	-.05070
4.591	8.420	-.05000	.00170	.00710	.00800	.07750	-.05070	-.05050
4.591	9.650	-.06000	.00150	.00700	.00790	.07600	-.05020	-.05050
4.591	10.890	-.07000	.00130	.00700	.00790	.07430	-.05020	-.05050
4.591	12.140	-.08000	.00100	.00700	.00790	.07290	-.05020	-.05020
4.591	13.410	-.08000	.00070	.00700	.00790	.07140	-.05010	-.05000
4.591	14.690	-.09000	.00030	.00700	.00780	.06990	-.04970	-.05000
4.591	15.960	-.10000	.00000	.00700	.00780	.06840	-.04940	-.04980
4.591	17.250	-.11000	-.00040	.00710	.00780	.06690	-.04940	-.04980
4.591	18.550	-.11000	-.00080	.00710	.00770	.06570	-.04920	-.04950
4.591	19.840	-.12000	-.00120	.00730	.00770	.06460	-.04910	-.04930
4.591	21.160	-.13000	-.00170	.00740	.00770	.06360	-.04890	-.04910
4.591	22.510	-.14000	-.00230	.00770	.00770	.06280	-.04870	-.04880
4.591	23.850	-.14000	-.00300	.00800	.00760	.06190	-.04860	-.04880
4.591	25.200	-.15000	-.00370	.00820	.00760	.06080	-.04840	-.04900
4.591	26.570	-.16000	-.00410	.00850	.00760	.05980	-.04820	-.04860
4.591	27.920	-.17000	-.00460	.00870	.00760	.05900	-.04810	-.04850
4.591	29.290	-.17000	-.00520	.00900	.00760	.05820	-.04790	-.04850
4.591	30.570	-.18000	-.00560	.00930	.00750	.05750	-.04790	-.04830
4.591	31.620	-.19000	-.00600	.00950	.00760	.05690	-.04820	-.04850
4.591	32.300	-.19000	-.00630	.00960	.00760	.05650	-.04820	-.04850
4.591	32.690	-.19000	-.00640	.00960	.00760	.05590	-.04860	-.04880
	GRADIENT	-.00540	-.00052	-.00029	.00008	-.00274	-.00069	-.00034

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY024) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 1.000 A-SCHD = 1.000
PHI = .000

RUN NO. 44/ 0 RN/L = 15.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.450	-.01000	.00500	.00880	.00720	.09680	-.04460	-.04820
4.591	1.730	-.02000	.00430	.00830	.00730	.09290	-.04510	-.04880
4.591	2.710	-.02000	.00400	.00800	.00740	.09050	-.04560	-.04910
4.591	3.620	-.03000	.00340	.00770	.00750	.08790	-.04650	-.04930
4.591	4.560	-.03000	.00280	.00750	.00760	.08540	-.04710	-.04980
4.591	5.490	-.04000	.00240	.00740	.00760	.08310	-.04780	-.05020
4.591	6.420	-.04000	.00210	.00720	.00770	.08120	-.04830	-.05100
4.591	7.360	-.05000	.00190	.00710	.00780	.07950	-.04870	-.05140
4.591	8.300	-.05000	.00160	.00710	.00790	.07790	-.04960	-.05190
4.591	9.240	-.06000	.00140	.00700	.00800	.07650	-.05020	-.05260
4.591	10.180	-.06000	.00130	.00700	.00810	.07510	-.05070	-.05310
4.591	11.120	-.07000	.00110	.00690	.00820	.07370	-.05120	-.05340
4.591	12.060	-.08000	.00090	.00690	.00830	.07250	-.05190	-.05400
4.591	13.010	-.08000	.00060	.00690	.00830	.07130	-.05240	-.05450
4.591	13.960	-.09000	.00030	.00690	.00840	.07010	-.05290	-.05480
4.591	14.920	-.09000	.00010	.00690	.00850	.06900	-.05320	-.05500
4.591	15.870	-.10000	-.00010	.00690	.00850	.06780	-.05370	-.05530
4.591	16.820	-.10000	-.00030	.00700	.00860	.06660	-.05380	-.05590
4.591	17.770	-.11000	-.00060	.00700	.00860	.06550	-.05400	-.05590
4.591	18.720	-.12000	-.00090	.00710	.00860	.06460	-.05420	-.05590
4.591	19.680	-.12000	-.00120	.00720	.00860	.06370	-.05420	-.05600
4.591	20.620	-.13000	-.00160	.00730	.00860	.06290	-.05430	-.05550
4.591	21.570	-.13000	-.00200	.00740	.00860	.06220	-.05430	-.05590
4.591	22.520	-.14000	-.00250	.00750	.00860	.06160	-.05450	-.05580
4.591	23.470	-.14000	-.00310	.00770	.00860	.06090	-.05470	-.05550
4.591	24.420	-.15000	-.00360	.00790	.00860	.06030	-.05430	-.05570
4.591	25.370	-.15000	-.00410	.00810	.00860	.05960	-.05470	-.05550
4.591	26.300	-.16000	-.00450	.00820	.00860	.05900	-.05400	-.05530
4.591	27.240	-.16000	-.00470	.00840	.00860	.05850	-.05420	-.05520
4.591	28.170	-.17000	-.00510	.00850	.00860	.05790	-.05420	-.05500
4.591	29.100	-.17000	-.00540	.00870	.00850	.05740	-.05380	-.05500
4.591	30.020	-.18000	-.00590	.00890	.00850	.05670	-.05400	-.05480
4.591	30.930	-.18000	-.00620	.00900	.00850	.05610	-.05400	-.05450
4.591	31.790	-.19000	-.00650	.00920	.00850	.05570	-.0537'	-.05450
4.591	32.530	-.19000	-.00680	.00930	.00840	.05550	-.05330	-.05430
	GRADIENT	-.00498	-.00052	-.00032	.00010	-.00275	-.00063	-.00037

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY025) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 45/ 0 RN/L = 17.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.370	-.01000	.00500	.00860	.00710	.09570	-.04450	-.04660
4.591	1.720	-.01000	.00440	.00800	.00720	.09160	-.04510	-.04720
4.591	2.980	-.02000	.00380	.00760	.00730	.08760	-.04560	-.04750
4.591	4.100	-.03000	.00290	.00740	.00740	.08490	-.04620	-.04810
4.591	5.240	-.04000	.00270	.00720	.00750	.08210	-.04690	-.04870
4.591	6.390	-.04000	.00240	.00700	.00750	.08030	-.04740	-.04910
4.591	7.540	-.05000	.00160	.00680	.00760	.07850	-.04800	-.04980
4.591	8.690	-.05000	.00200	.00680	.00780	.07700	-.04890	-.05060
4.591	9.840	-.06000	.00160	.00670	.00780	.07510	-.04940	-.05100
4.591	11.010	-.07000	.00130	.00660	.00800	.07320	-.05020	-.05180
4.591	12.160	-.08000	.00100	.00660	.00810	.07160	-.05070	-.05240
4.591	13.330	-.08000	.00080	.00660	.00810	.07030	-.05120	-.05250
4.591	14.500	-.09000	.00030	.00660	.00820	.06870	-.05180	-.05320
4.591	15.660	-.10000	.00000	.00660	.00830	.06720	-.05230	-.05320
4.591	16.830	-.10000	-.00040	.00660	.00830	.06570	-.05260	-.05390
4.591	18.010	-.11000	-.00080	.00660	.00840	.06470	-.05280	-.05390
4.591	19.180	-.12000	-.00120	.00680	.00840	.06340	-.05300	-.05410
4.591	20.350	-.12000	-.00150	.00690	.00840	.06240	-.05310	-.05430
4.591	21.520	-.13000	-.00200	.00700	.00840	.06150	-.05350	-.05430
4.591	22.690	-.14000	-.00250	.00720	.00850	.06070	-.05350	-.05440
4.591	23.860	-.14000	-.00310	.00740	.00840	.05980	-.05330	-.05430
4.591	25.040	-.15000	-.00380	.00770	.00840	.05900	-.05310	-.05390
4.591	26.200	-.16000	-.00420	.00790	.00840	.05830	-.05300	-.05390
4.591	27.360	-.16000	-.00450	.00820	.00840	.05770	-.05300	-.05390
4.591	28.520	-.17000	-.00500	.00830	.00830	.05700	-.05260	-.05370
4.591	29.670	-.18000	-.00550	.00860	.00830	.05620	-.05260	-.05370
4.591	30.790	-.18000	-.00590	.00880	.00830	.05540	-.05280	-.05340
4.591	31.890	-.19000	-.00630	.00900	.00830	.05470	-.05280	-.05340
4.591	32.630	-.19000	-.00650	.00910	.00830	.05450	-.05230	-.05300
	GRADIENT	-.00554	-.00055	-.00032	.00008	-.00293	-.00045	-.00038

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY026) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1045/ 0 RN/L = 18.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-1.510	.00000	.00610	.00950	.00790	.10060	-.05030	-.05100
4.591	-.580	.00000	.00540	.00900	.00800	.09720	-.05100	-.05130
4.591	.410	-.01000	.00510	.00850	.00810	.09410	-.05150	-.05220
4.591	1.440	-.01000	.00460	.00810	.00820	.09130	-.05220	-.05280
4.591	2.490	-.02000	.00410	.00780	.00830	.08840	-.05270	-.05310
4.591	3.560	-.02000	.00350	.00750	.00840	.08550	-.05320	-.05380
4.591	4.620	-.03000	.00290	.00730	.00850	.08260	-.05360	-.05440
4.591	5.710	-.04000	.00240	.00700	.00850	.08010	-.05420	-.05440
4.591	6.810	-.04000	.00220	.00690	.00860	.07790	-.05470	-.05490
4.591	7.910	-.05000	.00190	.00680	.00860	.07620	-.05490	-.05520
4.591	9.030	-.06000	.00170	.00670	.00870	.07460	-.05510	-.05540
4.591	10.160	-.06000	.00150	.00660	.00870	.07300	-.05520	-.05560
4.591	11.300	-.07000	.00120	.00650	.00870	.07150	-.05520	-.05560
4.591	12.450	-.08000	.00090	.00650	.00870	.07020	-.05510	-.05560
4.591	13.620	-.08000	.00050	.00650	.00860	.06890	-.05480	-.05540
4.591	14.800	-.09000	.00010	.00650	.00860	.06770	-.05480	-.05510
4.591	15.970	-.10000	-.00020	.00650	.00860	.06640	-.05460	-.05510
4.591	17.170	-.10000	-.00060	.00660	.00850	.06510	-.05430	-.05470
4.591	18.380	-.11000	-.00100	.00660	.00850	.06390	-.05390	-.05460
4.591	19.590	-.12000	-.00140	.00670	.00850	.06290	-.05360	-.05440
4.591	20.810	-.13000	-.00180	.00690	.00850	.06190	-.05360	-.05410
4.591	22.040	-.13000	-.00230	.00710	.00840	.06110	-.05340	-.05410
4.591	23.290	-.14000	-.00290	.00730	.00840	.06020	-.05290	-.05370
4.591	24.530	-.15000	-.00360	.00760	.00830	.05930	-.05300	-.05340
4.591	25.800	-.15000	-.00410	.00790	.00830	.05850	-.05280	-.05340
4.591	27.090	-.16000	-.00450	.00820	.00830	.05780	-.05260	-.05320
4.591	28.330	-.17000	-.00500	.00840	.00830	.05710	-.05250	-.05320
4.591	29.570	-.18000	-.00550	.00860	.00820	.05610	-.05230	-.05290
4.591	31.140	-.18000	-.00600	.00900	.00820	.05540	-.05200	-.05290
4.591	32.360	-.19000	-.00630	.00930	.00820	.05480	-.05210	-.05290
4.591	32.610	-.19000	-.00650	.00930	.00830	.05420	-.05230	-.05300
	GRADIENT	-.00488	-.00050	-.00036	.00010	-.00289	-.00054	-.00056

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY027) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 46/ 0 RN/L = 17.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.160	-.01000	.00500	.00870	.00720	.09730	-.04500	-.04680
4.591	.650	-.01000	.00490	.00850	.00720	.09600	-.04520	-.04720
4.591	1.670	-.01000	.00430	.00810	.00720	.09320	-.04560	-.04720
4.591	2.910	-.02000	.00380	.00770	.00730	.08970	-.04570	-.04770
4.591	4.180	-.03000	.00310	.00740	.00730	.08610	-.04610	-.04810
4.591	5.440	-.04000	.00260	.00720	.00740	.08280	-.04660	-.04820
4.591	6.690	-.04000	.00230	.00700	.00750	.08010	-.04690	-.04860
4.591	7.930	-.05000	.00200	.00690	.00760	.07770	-.04740	-.04940
4.591	9.180	-.06000	.00170	.00680	.00760	.07580	-.04770	-.04960
4.591	10.440	-.07000	.00150	.00680	.00770	.07400	-.04800	-.05010
4.591	11.700	-.07000	.00130	.00670	.00770	.07240	-.04850	-.05060
4.591	12.950	-.08000	.00080	.00670	.00780	.07080	-.04920	-.05100
4.591	14.220	-.09000	.00040	.00670	.00790	.06940	-.04950	-.05150
4.591	15.500	-.10000	.00010	.00670	.00790	.06790	-.04990	-.05180
4.591	16.770	-.10000	-.00020	.00670	.00800	.06640	-.05030	-.05240
4.591	18.050	-.11000	-.00070	.00670	.00810	.06510	-.05100	-.05240
4.591	19.330	-.12000	-.00120	.00680	.00810	.06390	-.05120	-.05270
4.591	20.610	-.13000	-.00160	.00690	.00820	.06290	-.05130	-.05290
4.591	21.910	-.13000	-.00220	.00700	.00820	.06190	-.05130	-.05290
4.591	23.200	-.14000	-.00290	.00730	.00820	.06110	-.05150	-.05310
4.591	24.480	-.15000	-.00360	.00750	.00820	.06000	-.05170	-.05320
4.591	25.770	-.15000	-.00410	.00780	.00820	.05910	-.05150	-.05310
4.591	27.060	-.16000	-.00450	.00800	.00820	.05820	-.05170	-.05300
4.591	28.340	-.17000	-.00500	.00830	.00820	.05740	-.05170	-.05300
4.591	29.610	-.18000	-.00550	.00850	.00820	.05660	-.05150	-.05300
4.591	30.810	-.18000	-.00590	.00870	.00820	.05610	-.05170	-.05290
4.591	31.670	-.19000	-.00620	.00890	.00820	.05570	-.05170	-.05310
4.591	32.110	-.19000	-.00630	.00900	.00820	.05530	-.05170	-.05270
	GRADIENT	-.00509	-.00048	-.00033	.00003	-.00279	-.00026	-.00030

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY028) (19 JAN 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.7000 IN. X0
LREF = 474.8100 INCHES YMRP = .0000 IN. Y0
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. Z0
SCALE = .0150

PARAMETRIC DATA

ELEVON = -20.000 AILRON = 20.000
SPDBRK = 55.000 BDFLAP = .000
LWGRIT = 25.000 RWGRIT = .000
A-RATE = 4.000 A-SCHD = 2.000
PHI = .000

RUN NO. 1046/ 0 RN/L = 17.81 GRADIENT INTERVAL. = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.230	-.01000	.00510	.00860	.00800	.09460	-.05100	-.05150
4.591	1.160	-.01000	.00470	.00820	.00810	.09200	-.05130	-.05200
4.591	2.120	-.02000	.00420	.00790	.00820	.08950	-.05200	-.05230
4.591	3.100	-.02000	.00370	.00760	.00820	.08690	-.05210	-.05290
4.591	4.070	-.03000	.00320	.00740	.00830	.08420	-.05280	-.05340
4.591	5.050	-.03000	.00270	.00720	.00840	.08180	-.05330	-.05350
4.591	6.060	-.04000	.00240	.00700	.00840	.07970	-.05350	-.05410
4.591	7.080	-.05000	.00210	.00690	.00850	.07780	-.05400	-.05420
4.591	8.100	-.05000	.00190	.00680	.00850	.07630	-.05430	-.05460
4.591	9.130	-.06000	.00170	.00680	.00860	.07480	-.05450	-.05480
4.591	10.180	-.06000	.00150	.00670	.00860	.07320	-.05450	-.05490
4.591	11.220	-.07000	.00130	.00660	.00860	.07180	-.05450	-.05490
4.591	12.280	-.08000	.00090	.00660	.00860	.07060	-.05440	-.05510
4.591	13.350	-.08000	.00060	.00660	.00860	.06940	-.05430	-.05490
4.591	14.430	-.09000	.00020	.00660	.00850	.06830	-.05400	-.05490
4.591	15.520	-.10000	.00000	.00660	.00850	.06700	-.05410	-.05440
4.591	16.620	-.10000	-.00040	.00660	.00850	.06570	-.05360	-.05480
4.591	17.720	-.11000	-.00080	.00670	.00840	.06460	-.05350	-.05420
4.591	18.830	-.11000	-.00120	.00670	.00840	.06380	-.05330	-.05420
4.591	19.950	-.12000	-.00150	.00680	.00840	.06290	-.05300	-.05390
4.591	21.080	-.13000	-.00190	.00700	.00840	.06190	-.05280	-.05370
4.591	22.220	-.13000	-.00240	.00710	.00830	.06140	-.05230	-.05360
4.591	23 360	-.14000	-.00300	.00740	.00830	.06050	-.05230	-.05310
4.591	24.520	-.15000	-.00360	.00760	.00820	.05980	-.05200	-.05320
4.591	25.680	-.15000	-.00410	.00790	.00820	.05900	-.05210	-.05300
4.591	26.860	-.16000	-.00450	.00810	.00820	.05840	-.05200	-.05290
4.591	28.030	-.17000	-.00490	.00830	.00820	.05760	-.05180	-.05290
4.591	29.170	-.17000	-.00540	.00850	.00820	.05680	-.05170	-.05270
4.591	30.480	-.18000	-.00570	.00880	.00810	.05600	-.05150	-.05250
4.591	31.770	-.19000	-.00620	.00910	.00810	.05540	-.05130	-.05250
4.591	32.230	-.19000	-.00630	.00900	.00820	.05500	-.05130	-.05290
	GRADIENT	-.00520	-.00050	-.00031	.00007	-.00269	-.00046	-.00049

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY029) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 47/ 0 RN/L = 17.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.420	-.01000	.00500	.00850	.00700	.09550	-.04400	-.04630
4.591	1.810	-.02000	.00450	.00800	.00710	.09180	-.04440	-.04650
4.591	2.930	-.02000	.00390	.00770	.00720	.08860	-.04520	-.04710
4.591	3.970	-.03000	.00330	.00740	.00730	.08530	-.04590	-.04760
4.591	5.020	-.03000	.00270	.00710	.00740	.08230	-.04660	-.04830
4.591	6.080	-.04000	.00230	.00700	.00750	.08040	-.04710	-.04880
4.591	7.140	-.04000	.00180	.00690	.00760	.07860	-.04760	-.04930
4.591	8.200	-.05000	.00180	.00680	.00770	.07670	-.04840	-.05000
4.591	9.270	-.06000	.00170	.00670	.00780	.07520	-.04900	-.05070
4.591	10.330	-.06000	.00150	.00660	.00790	.07360	-.04950	-.05120
4.591	11.400	-.07000	.00120	.00660	.00800	.07220	-.05020	-.05170
4.591	12.480	-.08000	.00090	.00660	.00800	.07110	-.05050	-.05220
4.591	13.550	-.08000	.00060	.00660	.00810	.06960	-.05130	-.05260
4.591	14.610	-.09000	.00020	.00650	.00820	.06830	-.05180	-.05280
4.591	15.700	-.10000	.00000	.00650	.00830	.06700	-.05220	-.05350
4.591	16.780	-.10000	-.00040	.00650	.00830	.06570	-.05250	-.05380
4.591	17.850	-.11000	-.00080	.00660	.00840	.06440	-.05300	-.05380
4.591	18.940	-.12000	-.00120	.00670	.00830	.06370	-.05260	-.05400
4.591	20.010	-.12000	-.00150	.00680	.00840	.06260	-.05300	-.05420
4.591	21.080	-.13000	-.00190	.00690	.00840	.06170	-.05310	-.05410
4.591	22.170	-.13000	-.00240	.00700	.00840	.06100	-.05300	-.05420
4.591	23.250	-.14000	-.00290	.00720	.00840	.06030	-.05310	-.05420
4.591	24.320	-.15000	-.00350	.00750	.00840	.05950	-.05330	-.05420
4.591	25.400	-.15000	-.00400	.00770	.00840	.05880	-.05300	-.05380
4.591	26.460	-.16000	-.00430	.00790	.00830	.05820	-.05260	-.05360
4.591	27.540	-.16000	-.00470	.00800	.00830	.05760	-.05270	-.05350
4.591	28.590	-.17000	-.00500	.00820	.00830	.05690	-.05260	-.05330
4.591	29.640	-.18000	-.00550	.00840	.00830	.05620	-.05250	-.05330
4.591	30.690	-.18000	-.00570	.00860	.00830	.05550	-.05250	-.05330
4.591	31.690	-.19000	-.00610	.00880	.00830	.05490	-.05250	-.05330
4.591	32.530	-.19000	-.00640	.00900	.00820	.05460	-.05230	-.05280
	GRADIENT	-.00510	-.00048	-.00031	.00008	-.00285	-.00055	-.00038

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY030) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	471.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1047/ 0 RN/L = 18.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.160	.00000	.00520	.00870	.00820	.09520	-.05180	-.05200
4.591	.920	-.01000	.00470	.00820	.00820	.09200	-.05200	-.05260
4.591	2.010	-.02000	.00420	.00780	.00830	.08910	-.05250	-.05290
4.591	3.100	-.02000	.00360	.00750	.00830	.08620	-.05290	-.05330
4.591	4.230	-.03000	.00300	.00730	.00840	.08320	-.05330	-.05360
4.591	5.390	-.04000	.00250	.00710	.00840	.08040	-.05330	-.05400
4.591	6.600	-.04000	.00210	.00690	.00850	.07800	-.05360	-.05430
4.591	7.820	-.05000	.00180	.00670	.00850	.07620	-.05380	-.05410
4.591	9.040	-.06000	.00160	.00660	.00850	.07430	-.05380	-.05430
4.591	10.270	-.06000	.00130	.00660	.00850	.07270	-.05380	-.05450
4.591	11.520	-.07000	.00100	.00650	.00850	.07110	-.05380	-.05380
4.591	12.780	-.08000	.00070	.00650	.00840	.06970	-.05350	-.05380
4.591	14.050	-.09000	.00030	.00650	.00840	.06830	-.05330	-.05400
4.591	15.330	-.09000	-.00010	.00650	.00840	.06680	-.05300	-.05380
4.591	16.600	-.10000	-.00050	.00650	.00840	.06540	-.05300	-.05360
4.591	17.890	-.11000	-.00090	.00660	.00830	.06430	-.05280	-.05340
4.591	19.190	-.12000	-.00130	.00670	.00830	.06310	-.05260	-.05330
4.591	20.490	-.12000	-.00180	.00680	.00830	.06200	-.05250	-.05330
4.591	21.810	-.13000	-.00230	.00700	.00820	.06110	-.05210	-.05310
4.591	23.150	-.14000	-.00300	.00720	.00820	.06030	-.05200	-.05310
4.591	24.490	-.15000	-.00360	.00750	.00820	.05940	-.05200	-.05270
4.591	25.840	-.15000	-.00410	.00780	.00820	.05850	-.05210	-.05260
4.591	27.200	-.16000	-.00460	.00810	.00820	.05780	-.05180	-.05260
4.591	28.570	-.17000	-.00510	.00830	.00820	.05690	-.05200	-.05240
4.591	29.920	-.18000	-.00550	.00860	.00820	.05630	-.05200	-.05260
4.591	31.110	-.18000	-.00590	.00880	.00820	.05560	-.05180	-.05260
4.591	32.010	-.19000	-.00620	.00900	.00820	.05520	-.05180	-.05260
4.591	32.480	-.19000	-.00640	.00900	.00820	.05500	-.05200	-.05260
4.591	32.690	-.19000	-.00650	.00900	.00820	.05450	-.05180	-.05280
	GRADIENT	-.00638	-.00050	-.00032	.00005	-.00272	-.00036	-.00036

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY031) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 67/ 0 RN/L = 15.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	1.090	-.01000	.00530	.00880	.00740	.09340	.45750	-.04720
4.591	2.350	-.02000	.00460	.00840	.00740	.09020	.53100	-.04720
4.591	3.610	-.03000	.00380	.00800	.00750	.08690	.56820	-.04780
4.591	4.850	-.03000	.00320	.00770	.00760	.08370	.50210	-.04850
4.591	6.100	-.04000	.00270	.00750	.00770	.08090	.40360	-.04900
4.591	7.340	-.05000	.00220	.00740	.00770	.07860	.29350	-.04930
4.591	8.580	-.06000	.00190	.00730	.00780	.07670	.21110	-.04970
4.591	9.830	-.06000	.00160	.00720	.00790	.07490	.16240	-.05020
4.591	11.090	-.07000	.00130	.00720	.00790	.07330	.13920	-.05050
4.591	12.340	-.08000	.00100	.00710	.00800	.07160	.13760	-.05100
4.591	13.620	-.08000	.00060	.00710	.00800	.07010	.16200	-.05120
4.591	14.890	-.09000	.00030	.00710	.00820	.06860	.17580	-.05190
4.591	16.160	-.10000	.00000	.00720	.00820	.06720	.16080	-.05240
4.591	17.440	-.11000	-.00020	.00720	.00830	.06570	.12490	-.05280
4.591	18.720	-.11000	-.00060	.00740	.00830	.06430	.08800	-.05300
4.591	20.000	-.12000	-.00110	.00750	.00840	.06320	.06220	-.05330
4.591	21.280	-.13000	-.00160	.00760	.00840	.06220	.04540	-.05350
4.591	22.570	-.14000	-.00210	.00780	.00840	.06130	.03520	-.05350
4.591	23.850	-.14000	-.00280	.00800	.00850	.06030	.02800	-.05380
4.591	25.150	-.15000	-.00350	.00820	.00850	.05930	.02070	-.05380
4.591	26.440	-.16000	-.00410	.00840	.00850	.05850	.01260	-.05380
4.591	27.710	-.16000	-.00450	.00860	.00850	.05770	.00570	-.05380
4.591	28.990	-.17000	-.00500	.00890	.00840	.05700	.00060	-.05360
4.591	30.240	-.18000	-.00550	.00920	.00840	.05650	-.00310	-.05350
4.591	31.300	-.18000	-.00580	.00950	.00840	.05600	-.00750	-.05350
4.591	31.950	-.19000	-.00590	.00960	.00840	.05550	-.01110	-.05350
4.591	32.220	-.19000	-.00600	.00970	.00830	.05520	-.01360	-.05310
	GRADIENT	-.00559	-.00057	-.00030	.00006	-.00258	.01373	-.00036

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY032) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1067/ 0 RN/L = 16.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.960	.00000	.00600	.00960	.00790	.09860	.46060	-.05050
4.591	-.410	.00000	.00560	.00940	.00800	.09670	.51260	-.05100
4.591	.460	-.01000	.00530	.00890	.00820	.09400	.51600	-.05190
4.591	1.360	-.01000	.00480	.00860	.00830	.09150	.54330	-.05270
4.591	2.320	-.02000	.00430	.00830	.00840	.08880	.67020	-.05340
4.591	3.280	-.02000	.00370	.00800	.00850	.08630	.63240	-.05380
4.591	4.260	-.03000	.00320	.00780	.00850	.08380	.45220	-.05430
4.591	5.240	-.03000	.00270	.00760	.00860	.08140	.37790	-.05470
4.591	6.240	-.04000	.00230	.00750	.00870	.07940	.27780	-.05520
4.591	7.260	-.05000	.00210	.00740	.00870	.07760	.20030	-.05520
4.591	8.270	-.05000	.00180	.00730	.00870	.07610	.16320	-.05550
4.591	9.300	-.06000	.00160	.00720	.00880	.07470	.14100	-.05590
4.591	10.330	-.06000	.00140	.00720	.00880	.07340	.12930	-.05590
4.591	11.390	-.07000	.00120	.00710	.00880	.07200	.12810	-.05590
4.591	12.440	-.08000	.00090	.00710	.00880	.07070	.15950	-.05590
4.591	13.520	-.08000	.00050	.00710	.00880	.06950	.18960	-.05570
4.591	14.600	-.09000	.00020	.00710	.00870	.06840	.17000	-.05540
4.591	15.690	-.10000	.00000	.00710	.00870	.06720	.12970	-.05520
4.591	16.780	-.10000	-.00020	.00720	.00860	.06600	.08500	-.05480
4.591	17.900	-.11000	-.00060	.00720	.00860	.06480	.05770	-.05470
4.591	19.010	-.12000	-.00090	.00730	.00850	.06380	.04600	-.05430
4.591	20.120	-.12000	-.00120	.00740	.00850	.06290	.03540	-.05400
4.591	21.250	-.13000	-.00160	.00760	.00850	.06210	.02850	-.05380
4.591	22.400	-.13000	-.00210	.00770	.00840	.06140	.02290	-.05350
4.591	23.530	-.14000	-.00270	.00800	.00830	.06060	.01510	-.05290
4.591	24.690	-.15000	-.00340	.00810	.00830	.05970	.00470	-.05280
4.591	26.150	-.16000	-.00400	.00840	.00830	.05880	-.00220	-.05280
4.591	27.320	-.16000	-.00430	.00860	.00830	.05820	-.00410	-.05280
4.591	28.470	-.17000	-.00480	.00890	.00830	.05760	-.00700	-.05280
4.591	29.660	-.17000	-.00530	.00920	.00820	.05680	-.01230	-.05240
4.591	31.040	-.18000	-.00560	.00950	.00820	.05590	-.01630	-.05240
4.591	32.100	-.19000	-.00600	.00970	.00830	.05540	-.01740	-.05290
	GRADIENT	-.00564	-.00053	-.00035	.00012	-.00282	.01354	-.00074

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY033) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 68/ 0 RN/L = 15.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.710	.00000	.00590	.00940	.00740	.09870	.07320	-.04740
4.591	.700	-.01000	.00500	.00890	.00750	.09470	.07200	-.04780
4.591	1.800	-.02000	.00450	.00840	.00760	.09160	.07700	-.04830
4.591	2.830	-.02000	.00420	.00820	.00760	.08870	.07960	-.04870
4.591	3.890	-.03000	.00360	.00800	.00770	.08590	.07110	-.04920
4.591	4.940	-.03000	.00310	.00770	.00780	.08320	.05950	-.04970
4.591	6.010	-.04000	.00260	.00750	.00790	.08080	.04890	-.05000
4.591	7.070	-.05000	.00230	.00740	.00800	.07880	.03750	-.05070
4.591	8.130	-.05000	.00200	.00730	.00810	.07700	.02880	-.05140
4.591	9.200	-.06000	.00180	.00720	.00810	.07550	.02070	-.05160
4.591	10.260	-.06000	.00160	.00720	.00820	.07400	.01790	-.05240
4.591	11.340	-.07000	.00140	.00720	.00830	.07250	.01950	-.05310
4.591	12.410	-.08000	.00110	.00710	.00840	.07120	.01740	-.05330
4.591	13.490	-.08000	.00070	.00710	.00850	.06990	.00940	-.05380
4.591	14.560	-.09000	.00040	.00710	.00850	.06870	.00000	-.05430
4.591	15.640	-.10000	.00000	.00710	.00860	.06750	-.00460	-.05470
4.591	16.720	-.10000	-.00010	.00720	.00870	.06630	-.00700	-.05520
4.591	17.790	-.11000	-.00040	.00720	.00870	.06500	-.00950	-.05520
4.591	18.870	-.12000	-.00070	.00730	.00870	.06390	-.01250	-.05550
4.591	19.960	-.12000	-.00110	.00740	.00880	.06280	-.01490	-.05570
4.591	21.040	-.13000	-.00150	.00750	.00880	.06200	-.01570	-.05590
4.591	22.120	-.13000	-.00190	.00770	.00870	.06120	-.01510	-.05550
4.591	23.190	-.14000	-.00250	.00790	.00880	.06050	-.01410	-.05570
4.591	24.280	-.15000	-.00310	.00810	.00870	.05980	-.01260	-.05540
4.591	25.350	-.15000	-.00370	.00820	.00870	.05900	-.00930	-.05520
4.591	26.430	-.16000	-.00410	.00840	.00860	.05840	-.00590	-.05500
4.591	27.490	-.16000	-.00440	.00860	.00860	.05790	-.00350	-.05480
4.591	28.550	-.17000	-.00480	.00880	.00860	.05740	-.00200	-.05450
4.591	29.600	-.17000	-.00530	.00910	.00850	.05680	-.00040	-.05410
4.591	30.650	-.18000	-.00550	.00930	.00850	.05600	.00130	-.05410
4.591	31.660	-.19000	-.00580	.00950	.00850	.05530	.00280	-.05400
4.591	32.510	-.19000	-.00620	.00960	.00840	.05500	.00910	-.05360
	GRADIENT	-.00545	-.00048	-.00030	.00007	-.00275	-.00169	-.00041

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY034) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1068/ 0 RN/L = 16.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.980	.00000	.00600	.00960	.00830	.09820	.07170	-.05260
4.591	-.480	.00000	.00570	.00930	.00830	.09650	.07240	-.05310
4.591	.360	-.01000	.00530	.00900	.00840	.09390	.07520	-.05340
4.591	1.380	-.01000	.00480	.00860	.00850	.09100	.07510	-.05390
4.591	2.430	-.02000	.00420	.00820	.00860	.08810	.06690	-.05450
4.591	3.520	-.03000	.00360	.00800	.00860	.08520	.05630	-.05480
4.591	4.640	-.03000	.00300	.00770	.00860	.08260	.04480	-.05480
4.591	5.810	-.04000	.00250	.00750	.00860	.08010	.03290	-.05500
4.591	7.020	-.05000	.00220	.00740	.00870	.07790	.02370	-.05530
4.591	8.240	-.05000	.00180	.00730	.00870	.07610	.01890	-.05530
4.591	9.460	-.06000	.00160	.00720	.00870	.07440	.01640	-.05530
4.591	10.700	-.07000	.00140	.00710	.00870	.07280	.01190	-.05520
4.591	11.950	-.07000	.00110	.00710	.00870	.07130	.00400	-.05530
4.591	13.210	-.08000	.00070	.00710	.00860	.06990	-.00350	-.05480
4.591	14.480	-.09000	.00030	.00710	.00860	.06850	-.00810	-.05480
4.591	15.750	-.10000	.00000	.00710	.00860	.06720	-.01100	-.05450
4.591	17.030	-.10000	-.00030	.00710	.00860	.06570	-.01350	-.05450
4.591	18.320	-.11000	-.00070	.00720	.00850	.06450	-.01450	-.05400
4.591	19.610	-.12000	-.00110	.00730	.00840	.06330	-.01370	-.05360
4.591	20.910	-.13000	-.00160	.00750	.00840	.06230	-.01150	-.05360
4.591	22.250	-.13000	-.00220	.00770	.00840	.06130	-.00920	-.05330
4.591	23.600	-.14000	-.00280	.00790	.00830	.06040	-.00610	-.05310
4.591	24.950	-.15000	-.00350	.00820	.00830	.05950	-.00380	-.05290
4.591	26.310	-.16000	-.00410	.00840	.00830	.05870	-.00170	-.05310
4.591	27.670	-.16000	-.00450	.00870	.00830	.05800	.00040	-.05310
4.591	29.030	-.17000	-.00500	.00900	.00830	.05720	.00330	-.05280
4.591	30.360	-.18000	-.00540	.00930	.00830	.05650	.00790	-.05290
4.591	31.500	-.18000	-.00580	.00960	.00830	.05580	.01420	-.05290
4.591	32.340	-.19000	-.00610	.00970	.00840	.05540	.02020	-.05330
4.591	32.710	-.19000	-.00630	.00970	.00840	.05520	.02090	-.05330
	GRADIENT	-.00594	-.00053	-.00033	.00006	-.00278	-.00473	-.00040

LTV-44-512 (LA-58) CRBITER MODEL 42-0 (BWVFO) (AHY035) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 59/ 0 RN/L = 15.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.780	.02000	-.00580	-.00810	.00710	.09930	-.04400	-.04690
4.591	-.450	.02000	-.00570	-.00800	.00710	.09870	-.04410	-.04720
4.591	.430	.01000	-.00540	-.00780	.00710	.09620	-.04460	-.04700
4.591	1.630	.00000	-.00480	-.00740	.00720	.09300	-.04480	-.04730
4.591	2.880	.00000	-.00410	-.00710	.00730	.08960	-.04540	-.04770
4.591	4.140	-.01000	-.00370	-.00670	.00730	.08630	-.04540	-.04800
4.591	5.390	-.02000	-.00330	-.00660	.00730	.08310	-.04590	-.04810
4.591	6.630	-.02000	-.00300	-.00650	.00740	.08040	-.04650	-.04840
4.591	7.880	-.03000	-.00280	-.00640	.00740	.07830	-.04660	-.04880
4.591	9.120	-.04000	-.00240	-.00640	.00750	.07660	-.04710	-.04930
4.591	10.370	-.05000	-.00210	-.00650	.00760	.07500	-.04760	-.04970
4.591	11.630	-.06000	-.00170	-.00660	.00770	.07330	-.04800	-.05040
4.591	12.890	-.07000	-.00140	-.00670	.00780	.07180	-.04860	-.05090
4.591	14.170	-.08000	-.00090	-.00670	.00780	.07030	-.04910	-.05120
4.591	15.440	-.08000	-.00040	-.00680	.00790	.06880	-.04950	-.05190
4.591	16.720	-.09000	.00010	-.00680	.00800	.06720	-.05010	-.05190
4.591	18.000	-.10000	.00060	-.00690	.00800	.06590	-.05040	-.05260
4.591	19.270	-.11000	.00100	-.00700	.00810	.06470	-.05090	-.05260
4.591	20.550	-.12000	.00140	-.00710	.00810	.06350	-.05110	-.05260
4.591	21.840	-.13000	.00170	-.00720	.00810	.06230	-.05110	-.05280
4.591	23.130	-.13000	.00200	-.00740	.00820	.06120	-.05140	-.05290
4.591	24.420	-.14000	.00230	-.00750	.00820	.06020	-.05140	-.05310
4.591	25.710	-.15000	.00270	-.00770	.00820	.05930	-.05170	-.05330
4.591	26.990	-.16000	.00320	-.00800	.00820	.05860	-.05190	-.05310
4.591	28.270	-.16000	.00370	-.00830	.00820	.05790	-.05190	-.05340
4.591	29.540	-.17000	.00420	-.00850	.00830	.05710	-.05210	-.05340
4.591	30.730	-.18000	.00480	-.00880	.00820	.05670	-.05190	-.05330
4.591	31.630	-.18000	.00540	-.00910	.00830	.05630	-.05210	-.05340
4.591	32 100	-.18000	.00570	-.00920	.00820	.05580	-.05190	-.05340
	GRADIENT	-.00606	.00045	.00028	.00005	-.00267	-.00030	-.00021

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY036) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1059/ 0 RN/L = 16.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.770	.02000	-.00580	-.00820	.00790	.09820	-.05070	-.05040
4.591	.010	.01000	-.00540	-.00780	.00800	.09570	-.05100	-.05080
4.591	.910	.00000	-.00480	-.00760	.00810	.09320	-.05140	-.05150
4.591	1.850	.00000	-.00440	-.00740	.00820	.09070	-.05190	-.05200
4.591	2.810	.00000	-.00400	-.00710	.00820	.08820	-.05240	-.05260
4.591	3.780	.00000	-.00370	-.00680	.00830	.08570	-.05250	-.05270
4.591	4.750	-.01000	-.00340	-.00670	.00840	.08320	-.05320	-.05360
4.591	5.740	-.02000	-.00320	-.00660	.00850	.08080	-.05370	-.05430
4.591	6.760	-.02000	-.00290	-.00650	.00860	.07880	-.05420	-.05480
4.591	7.760	-.03000	-.00280	-.00640	.00860	.07730	-.05440	-.05500
4.591	8.780	-.04000	-.00260	-.00650	.00870	.07590	-.05490	-.05550
4.591	9.820	-.05000	-.00230	-.00650	.00870	.07460	-.05490	-.05550
4.591	10.860	-.05000	-.00200	-.00660	.00870	.07330	-.05490	-.05570
4.591	11.900	-.06000	-.00160	-.00660	.00860	.07200	-.05490	-.05530
4.591	12.970	-.07000	-.00130	-.00670	.00860	.07080	-.05470	-.05520
4.591	14.050	-.07000	-.00090	-.00670	.00860	.06970	-.05420	-.05500
4.591	15.130	-.08000	-.00040	-.00680	.00860	.06830	-.05420	-.05500
4.591	16.220	-.09000	.00000	-.00680	.00850	.06700	-.05390	-.05450
4.591	17.320	-.10000	.00040	-.00690	.00850	.06590	-.05370	-.05430
4.591	18.430	-.10000	.00080	-.00690	.00840	.06460	-.05350	-.05410
4.591	19.540	-.11000	.00110	-.00700	.00840	.06370	-.05310	-.05390
4.591	20.660	-.12000	.00140	-.00720	.00840	.06270	-.05320	-.05400
4.591	21.790	-.12000	.00170	-.00730	.00840	.06190	-.05300	-.05380
4.591	22.940	-.13000	.00190	-.00740	.00840	.06110	-.05290	-.05360
4.591	24.070	-.14000	.00220	-.00750	.00830	.06030	-.05270	-.05380
4.591	25.240	-.15000	.00260	-.00770	.00830	.05950	-.05260	-.05360
4.591	26.410	-.15000	.00300	-.00780	.00820	.05890	-.05210	-.05330
4.591	27.580	-.16000	.00360	-.00810	.00820	.05830	-.05190	-.05330
4.591	28.720	-.17000	.00390	-.00830	.00820	.05770	-.05170	-.05290
4.591	29.940	-.17000	.00440	-.00860	.00810	.05700	-.05120	-.05260
4.591	31.320	-.18000	.00530	-.00900	.00810	.05620	-.05120	-.05260
4.591	32.200	-.18000	.00580	-.00920	.00810	.05580	-.05120	-.05260
	GRADIENT	-.00418	.00044	.00027	.00008	-.00269	-.00044	-.00056

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY037) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 60/ 0 RN/L = 15.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.670	.02000	-.00590	-.00840	.00720	.09910	-.04480	-.04700
4.591	.710	.01000	-.00510	-.00780	.00730	.09500	-.04560	-.04750
4.591	1.810	.00000	-.00440	-.00750	.00730	.09220	-.04580	-.04770
4.591	2.840	.00000	-.00400	-.00720	.00730	.08940	-.04610	-.04790
4.591	3 900	-.01000	-.00350	-.00690	.00740	.08680	-.04660	-.04840
4.591	4.950	-.01000	-.00330	-.00670	.00750	.08410	-.04730	-.04900
4.591	6.010	-.02000	-.00310	-.00660	.00750	.08160	-.04750	-.04910
4.591	7.080	-.03000	-.00280	-.00650	.00760	.07950	-.04790	-.04980
4.591	8.140	-.04000	-.00260	-.00640	.00770	.07790	-.04840	-.05030
4.591	9.200	-.04000	-.00240	-.00650	.00780	.07650	-.04930	-.05080
4.591	10.280	-.05000	-.00210	-.00650	.00790	.07500	-.04980	-.05170
4.591	11.330	-.06000	-.00180	-.00660	.00800	.07360	-.05060	-.05220
4.591	12.400	-.06000	-.00150	-.00660	.00810	.07210	-.05110	-.05310
4.591	13.490	-.07000	-.00110	-.00670	.00820	.07080	-.05170	-.05340
4.591	14.570	-.08000	-.00070	-.00670	.00830	.06960	-.05220	-.05390
4.591	15.640	-.09000	-.00030	-.00680	.00840	.06810	-.05290	-.05430
4.591	16.720	-.09000	.00010	-.00680	.00840	.06690	-.05320	-.05460
4.591	17.810	-.10000	.00050	-.00690	.00840	.06570	-.05340	-.05450
4.591	18.880	-.11000	.00090	-.00690	.00850	.06440	-.05370	-.05480
4.591	19.950	-.11000	.00120	-.00710	.00850	.06350	-.05390	-.05500
4.591	21.040	-.12000	.00150	-.00710	.00850	.06260	-.05370	-.05460
4.591	22.120	-.13000	.00180	-.00720	.00850	.06170	-.05390	-.05480
4.591	23.200	-.13000	.00210	-.00730	.00850	.06100	-.05350	-.05460
4.591	24 280	-.14000	.00240	-.00740	.00850	.06040	-.05350	-.05430
4.591	25.350	-.15000	.00270	-.00760	.00850	.05960	-.05370	-.05460
4.591	26.430	-.15000	.00300	-.00780	.00850	.05890	-.05390	-.05480
4.591	27.490	-.16000	.00350	-.00800	.00850	.05820	-.05390	-.05460
4.591	28.550	-.16000	.00390	-.00830	.00850	.05770	-.05350	-.05460
4.591	29.600	-.17000	.00420	-.00850	.00850	.05700	-.05370	-.05460
4.591	30.650	-.18000	.00480	-.00870	.00850	.05640	-.05350	-.05460
4.591	31.660	-.18000	.00540	-.00900	.00840	.05570	-.05340	-.05430
4.591	32.500	-.19000	.00590	-.00920	.00840	.05530	-.05300	-.05410
	GRADIENT	-.00547	.00047	.00030	.00005	-.00265	-.00041	-.00033

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY038) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1060/ 0 RN/L = 16.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-1.000	.02000	-.00580	-.00840	.00810	.09880	-.05150	-.05170
4.591	-.640	.02000	-.00560	-.00820	.00820	.09750	-.05190	-.05220
4.591	.100	.01000	-.00520	-.00790	.00820	.09520	-.05240	-.05250
4.591	1.110	.00000	-.00460	-.00760	.00830	.09240	-.05290	-.05300
4.591	2.160	.00000	-.00420	-.00730	.00840	.08960	-.05300	-.05340
4.591	3.240	.00000	-.00380	-.00700	.00840	.08690	-.05330	-.05370
4.591	4.360	-.01000	-.00340	-.00680	.00840	.08400	-.05350	-.05410
4.591	5.530	-.02000	-.00320	-.00660	.00850	.08130	-.05400	-.05440
4.591	6.730	-.02000	-.00290	-.00650	.00850	.07890	-.05420	-.05480
4.591	7.950	-.03000	-.00260	-.00650	.00860	.07710	-.05430	-.05510
4.591	9.170	-.04000	-.00240	-.00650	.00860	.07560	-.05430	-.05510
4.591	10.400	-.05000	-.00200	-.00650	.00850	.07400	-.05400	-.05500
4.591	11.650	-.06000	-.00170	-.00660	.00850	.07250	-.05400	-.05460
4.591	12.900	-.07000	-.00130	-.00670	.00850	.07100	-.05370	-.05460
4.591	14.180	-.08000	-.00080	-.00680	.00850	.06950	-.05370	-.05460
4.591	15.450	-.09000	-.00030	-.00680	.00850	.06800	-.05350	-.05430
4.591	16.720	-.09000	.00020	-.00680	.00840	.06660	-.05320	-.05430
4.591	18.010	-.10000	.00060	-.00690	.00840	.06520	-.05320	-.05410
4.591	19.300	-.11000	.00110	-.00700	.00840	.06390	-.05300	-.05390
4.591	20.580	-.12000	.00140	-.00710	.00840	.06280	-.05300	-.05380
4.591	21.900	-.13000	.00170	-.00720	.00840	.06180	-.05290	-.05380
4.591	23.230	-.13000	.00200	-.00740	.00830	.06100	-.05250	-.05380
4.591	24.550	-.14000	.00240	-.00760	.00830	.06030	-.05240	-.05340
4.591	25.880	-.15000	.00280	-.00780	.00820	.05960	-.05200	-.05310
4.591	27.220	-.16000	.00330	-.00810	.00830	.05870	-.05220	-.05320
4.591	28.570	-.16000	.00390	-.00830	.00820	.05780	-.05200	-.05310
4.591	29.930	-.17000	.00450	-.00860	.00820	.05720	-.05200	-.05310
4.591	31.100	-.18000	.00520	-.00890	.00830	.05650	-.05220	-.05310
4.591	31.990	-.18000	.00570	-.00910	.00830	.05600	-.05220	-.05310
4.591	32.440	-.19000	.00590	-.00920	.00830	.05570	-.05240	-.05320
4.591	32.710	-.19000	.00600	-.00930	.00830	.05510	-.05250	-.05360
	GRADIENT	-.00528	.00045	.00030	.00006	-.00273	-.00035	-.00042

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (AHY039) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 50/ 0 RN/L = 16.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.560	.01000	-.00530	-.00790	.00690	.09430	-.04330	-.04590
4.591	2.130	.00000	-.00460	-.00760	.00700	.09040	-.04400	-.04610
4.591	3.350	.00000	-.00420	-.00720	.00720	.08760	-.04500	-.04680
4.591	4.500	-.01000	-.00370	-.00700	.00720	.08420	-.04540	-.04730
4.591	5.680	-.02000	-.00330	-.00680	.00730	.08120	-.04610	-.04800
4.591	6.860	-.03000	-.00300	-.00680	.00740	.07920	-.04680	-.04830
4.591	8.050	-.03000	-.00280	-.00670	.00760	.07710	-.04760	-.04920
4.591	9.240	-.04000	-.00250	-.00670	.00760	.07550	-.04770	-.04990
4.591	10.440	-.05000	-.00220	-.00670	.00770	.07390	-.04870	-.05040
4.591	11.630	-.06000	-.00190	-.00680	.00790	.07250	-.04950	-.05140
4.591	12.830	-.07000	-.00160	-.00680	.00800	.07110	-.05000	-.05180
4.591	14.030	-.07000	-.00120	-.00680	.00810	.06960	-.05090	-.05230
4.591	15.230	-.08000	-.00070	-.00690	.00810	.06800	-.05130	-.05260
4.591	16.430	-.09000	-.00010	-.00690	.00820	.06640	-.05170	-.05310
4.591	17.640	-.10000	.00030	-.00690	.00830	.06520	-.05220	-.05350
4.591	18.840	-.11000	.00070	-.00690	.00830	.06390	-.05250	-.05370
4.591	20.050	-.11000	.00110	-.00700	.00830	.06300	-.05250	-.05380
4.591	21.260	-.12000	.00140	-.00710	.00830	.06210	-.05250	-.05400
4.591	22.470	-.13000	.00180	-.00720	.00840	.06110	-.05280	-.05400
4.591	23.670	-.14000	.00220	-.00720	.00840	.06020	-.05300	-.05370
4.591	24.880	-.14000	.00250	-.00740	.00840	.05950	-.05320	-.05400
4.591	26.070	-.15000	.00280	-.00760	.00840	.05890	-.05300	-.05420
4.591	27.270	-.16000	.00310	-.00800	.00840	.05820	-.05320	-.05420
4.591	28.460	-.16000	.00360	-.00820	.00840	.05750	-.05320	-.05400
4.591	29.650	-.17000	.00400	-.00840	.00840	.05670	-.05300	-.05400
4.591	30.810	-.18000	.00470	-.00860	.00830	.05590	-.05280	-.05360
4.591	31.930	-.18000	.00530	-.00890	.00830	.05520	-.05250	-.05350
4.591	32.690	-.19000	.00570	-.00900	.00820	.05500	-.05180	-.05310
	GRADIENT	-.00461	.00040	.00024	.00008	-.00253	-.00056	-.00037

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY040) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1050/ 0 RN/L = 17.15 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.350	.01000	-.00570	-.00810	.00800	.09530	-.05080	-.05060
4.591	.680	.01000	-.00510	-.00790	.00810	.09240	-.05140	-.05130
4.591	1.740	.00000	-.00460	-.00760	.00810	.08960	-.05180	-.05170
4.591	2.840	.00000	-.00420	-.00740	.00820	.08680	-.05230	-.05220
4.591	3.930	-.01000	-.00380	-.00720	.00830	.08400	-.05260	-.05270
4.591	5.040	-.01000	-.00350	-.00700	.00840	.08130	-.05310	-.05340
4.591	6.160	-.02000	-.00330	-.00690	.00840	.07870	-.05360	-.05380
4.591	7.300	-.03000	-.00300	-.00680	.00850	.07670	-.05410	-.05450
4.591	8.440	-.04000	-.00270	-.00680	.00860	.07530	-.05450	-.05470
4.591	9.610	-.04000	-.00240	-.00680	.00860	.07390	-.05440	-.05480
4.591	10.780	-.05000	-.00210	-.00680	.00860	.07250	-.05450	-.05500
4.591	11.950	-.06000	-.00180	-.00690	.00860	.07120	-.05450	-.05480
4.591	13.150	-.07000	-.00150	-.00690	.00860	.06980	-.05430	-.05480
4.591	14.350	-.08000	-.00100	-.00690	.00850	.06850	-.05410	-.05480
4.591	15.570	-.08000	-.00060	-.00700	.00850	.06700	-.05400	-.05470
4.591	16.800	-.09000	.00000	-.00700	.00850	.06550	-.05400	-.05470
4.591	18.040	-.10000	.00040	-.00700	.00850	.06420	-.05360	-.05420
4.591	19.280	-.11000	.00080	-.00700	.00840	.06320	-.05350	-.05400
4.591	20.540	-.12000	.00120	-.00720	.00840	.06230	-.05310	-.05420
4.591	21.810	-.12000	.00160	-.00730	.00840	.06140	-.05300	-.05420
4.591	23.070	-.13000	.00200	-.00730	.00830	.06050	-.05280	-.05350
4.591	24.360	-.14000	.00230	-.00740	.00830	.05990	-.05250	-.05350
4.591	25.660	-.15000	.00260	-.00770	.00820	.05930	-.05220	-.05310
4.591	26.980	-.16000	.00310	-.00800	.00820	.05850	-.05180	-.05310
4 591	28.240	-.16000	.00350	-.00820	.00810	.05780	-.05130	-.05260
4.591	29.520	-.17000	.00400	-.00840	.00810	.05680	-.05120	-.05260
4.591	31.200	-.18000	.00490	-.00870	.00810	.05610	-.05120	-.05230
4.591	32.380	-.19000	.00560	-.00890	.00810	.05550	-.05120	-.05240
4.591	32.600	-.19000	.00570	-.00890	.00810	.05480	-.05150	-.05240
	GRADIENT	-.00467	.00044	.00021	.00007	-.00263	-.00042	-.00048

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY041) (19 JAN 76)

REFERENCE DATA

SREF =	2590.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 49/ 0 RN/L = 16.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.120	.01000	-.00580	-.00830	.00700	.09550	-.04360	-.04680
4.591	.580	.01000	-.00550	-.00810	.00710	.09430	-.04410	-.04690
4.591	1.580	.00000	-.00500	-.00780	.00720	.09150	-.04460	-.04740
4.591	2.810	.00000	-.00450	-.00750	.00720	.08850	-.04480	-.04740
4.591	4.070	-.01000	-.00410	-.00720	.00730	.08530	-.04530	-.04800
4.591	5.320	-.02000	-.00360	-.00700	.00730	.08220	-.04560	-.04810
4.591	6.580	-.02000	-.00320	-.00680	.00740	.07950	-.04590	-.04870
4.591	7.820	-.03000	-.00280	-.00680	.00750	.07740	-.04660	-.04900
4.591	9.070	-.04000	-.00260	-.00680	.00750	.07570	-.04670	-.04950
4.591	10.330	-.05000	-.00220	-.00680	.00760	.07410	-.04720	-.04980
4.591	11.580	-.06000	-.00190	-.00680	.00760	.07250	-.04770	-.05040
4.591	12.840	-.07000	-.00150	-.00680	.00770	.07090	-.04800	-.05090
4.591	14.100	-.08000	-.00110	-.00690	.00780	.06950	-.04870	-.05140
4.591	15.380	-.08000	-.00060	-.00700	.00790	.06810	-.04920	-.05190
4.591	16.650	-.09000	-.00010	-.00700	.00800	.06660	-.04980	-.05240
4.591	17.920	-.10000	.00030	-.00700	.00800	.06520	-.05030	-.05280
4.591	19.210	-.11000	.00080	-.00710	.00810	.06410	-.05050	-.05290
4.591	20.490	-.12000	.00110	-.00720	.00810	.06300	-.05080	-.05240
4.591	21.770	-.13000	.00140	-.00730	.00820	.06200	-.05120	-.05350
4.591	23.060	-.13000	.00180	-.00740	.00820	.06100	-.05130	-.05360
4.591	24.350	-.14000	.00220	-.00750	.00820	.06010	-.05170	-.05390
4.591	25.630	-.15000	.00260	-.00770	.00820	.05930	-.05170	-.05380
4.591	26.930	-.16000	.00300	-.00800	.00820	.05850	-.05170	-.05400
4.591	28.200	-.16000	.00350	-.00830	.00830	.05770	-.05200	-.05420
4.591	29.460	-.17000	.00400	-.00860	.00830	.05690	-.05200	-.05420
4.591	30.660	-.18000	.00460	-.00880	.00830	.05650	-.05180	-.05430
4.591	31.570	-.18000	.00510	-.00900	.00830	.05600	-.05180	-.05420
4.591	32.050	-.18000	.00540	-.00910	.00820	.05560	-.05170	-.05380
	GRADIENT	-.00494	.00043	.00027	.00007	-.00258	-.00039	-.00028

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY042) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1049/ 0 RN/L = 17.38 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.190	.01000	-.00530	-.00800	.00800	.09350	-.05080	-.05150
4.591	1.130	.00000	-.00480	-.00770	.00810	.09100	-.05030	-.05220
4.591	2.070	.00000	-.00440	-.00760	.00820	.08850	-.05180	-.05260
4.591	3.040	.00000	-.00400	-.00740	.00830	.08590	-.05230	-.05310
4.591	4.030	-.01000	-.00370	-.00720	.00830	.08350	-.05250	-.05360
4.591	5.010	-.01000	-.00350	-.00700	.00840	.08110	-.05300	-.05410
4.591	6.010	-.02000	-.00320	-.00690	.00850	.07880	-.05350	-.05470
4.591	7.030	-.03000	-.00290	-.00680	.00850	.07690	-.05400	-.05520
4.591	8.050	-.03000	-.00260	-.00680	.00860	.07540	-.05430	-.05550
4.591	9.080	-.04000	-.00240	-.00680	.00860	.07410	-.05450	-.05590
4.591	10.120	-.05000	-.00220	-.00680	.00870	.07290	-.05480	-.05590
4.591	11.170	-.06000	-.00190	-.00690	.00860	.07170	-.05450	-.05530
4.591	12.240	-.06000	-.00170	-.00690	.00860	.07040	-.05450	-.05600
4.591	13.290	-.07000	-.00140	-.00690	.00860	.06930	-.05430	-.05570
4.591	14.360	-.08000	-.00100	-.00700	.00860	.06810	-.05410	-.05570
4.591	15.460	-.08000	-.00060	-.00700	.00860	.06680	-.05400	-.05540
4.591	16.580	-.09000	-.00010	-.00710	.00850	.06550	-.05360	-.05550
4.591	17.670	-.10000	.00020	-.00710	.00850	.06440	-.05360	-.05520
4.591	18.780	-.11000	.00060	-.00720	.00850	.06340	-.05350	-.05520
4.591	19.890	-.11000	.00090	-.00730	.00840	.06270	-.05310	-.05480
4.591	21.040	-.12000	.00120	-.00740	.00840	.06180	-.05300	-.05480
4.591	22.160	-.13000	.00160	-.00750	.00840	.06100	-.05280	-.05470
4.591	23.290	-.13000	.00200	-.00750	.00840	.06020	-.05270	-.05450
4.591	24.460	-.14000	.00220	-.00770	.00830	.05980	-.05230	-.05420
4.591	25.620	-.15000	.00250	-.00790	.00830	.05920	-.05180	-.05420
4.591	26.800	-.15000	.00300	-.00810	.00820	.05840	-.05170	-.05400
4.591	27.960	-.16000	.00340	-.00830	.00820	.05770	-.05130	-.05380
4.591	29.110	-.17000	.00380	-.00850	.00810	.05710	-.05080	-.05330
4.591	30.410	-.18000	.00460	-.00870	.00810	.05640	-.05080	-.05330
4.591	31.710	-.18000	.00520	-.00890	.00810	.05580	-.05070	-.05310
4.591	32.210	-.19000	.00550	-.00910	.00810	.05520	-.05100	-.05330
	GRADIENT	-.00417	.00042	.00020	.00008	-.00262	-.00046	-.00053

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY043) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 48/ 0 RN/L = 17.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.410	.01000	-.00540	-.00800	.00720	.09500	-.04500	-.04690
4.591	1.790	.00000	-.00460	-.00760	.00720	.09040	-.04520	-.04700
4.591	2.930	.00000	-.00410	-.00730	.00730	.08710	-.04570	-.04760
4.591	3.950	-.01000	-.00370	-.00710	.00730	.08390	-.04610	-.04790
4.591	5.010	-.01000	-.00340	-.00700	.00740	.08120	-.04670	-.04830
4.591	6.070	-.02000	-.00300	-.00690	.00750	.07900	-.04720	-.04880
4.591	7.120	-.03000	-.00290	-.00680	.00760	.07730	-.04770	-.04950
4.591	8.200	-.04000	-.00250	-.00670	.00760	.07580	-.04800	-.04980
4.591	9.260	-.04000	-.00230	-.00680	.00780	.07410	-.04870	-.05050
4.591	10.330	-.05000	-.00220	-.00680	.00780	.07280	-.04920	-.05120
4.591	11.400	-.06000	-.00190	-.00680	.00790	.07160	-.04980	-.05150
4.591	12.470	-.06000	-.00160	-.00690	.00800	.07040	-.05050	-.05220
4.591	13.530	-.07000	-.00130	-.00690	.00810	.06900	-.05100	-.05280
4.591	14.610	-.08000	-.00090	-.00700	.00820	.06780	-.05180	-.05350
4.591	15.680	-.09000	-.00050	-.00710	.00830	.06630	-.05200	-.05360
4.591	16.770	-.09000	.00000	-.00720	.00830	.06500	-.05260	-.05380
4.591	17.840	-.10000	.00030	-.00720	.00830	.06380	-.05260	-.05400
4.591	18.920	-.11000	.00060	-.00720	.00840	.06290	-.05280	-.05430
4.591	19.990	-.11000	.00090	-.00740	.00840	.06200	-.05300	-.05430
4.591	21.070	-.12000	.00110	-.00750	.00840	.06110	-.05310	-.05450
4.591	22.150	-.13000	.00140	-.00760	.00840	.06040	-.05330	-.05450
4.591	23.220	-.13000	.00180	-.00770	.00850	.05950	-.05360	-.05480
4.591	24.300	-.14000	.00220	-.00770	.00850	.05890	-.05330	-.05480
4.591	25.380	-.15000	.00250	-.00790	.00850	.05830	-.05330	-.05480
4.591	26.440	-.15000	.00290	-.00820	.00850	.05780	-.05380	-.05480
4.591	27.510	-.16000	.00330	-.00850	.00850	.05710	-.05360	-.05480
4.591	28.570	-.16000	.00360	-.00870	.00850	.05660	-.05330	-.05480
4.591	29.620	-.17000	.00410	-.00890	.00840	.05580	-.05330	-.05460
4.591	30.650	-.18000	.00480	-.00910	.00840	.05510	-.05330	-.05450
4.591	31.660	-.18000	.00530	-.00930	.00840	.05440	-.05280	-.05450
4.591	32.510	-.19000	.00560	-.00950	.00830	.05410	-.05250	-.05400
	GRADIENT	-.00509	.00048	.00026	.00003	-.00312	-.00032	-.00030

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY044) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	X0	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	Y0	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	Z0	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1048/ 0 RN/L = 18.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.840	.02000	-.00590	-.00830	.00810	.09580	-.05160	-.05200
4.591	.150	.01000	-.00530	-.00790	.00820	.09250	-.05190	-.05250
4.591	1.240	.00000	-.00470	-.00770	.00820	.08970	-.05230	-.05290
4.591	2.320	.00000	-.00430	-.00750	.00830	.08680	-.05280	-.05340
4.591	3.430	.00000	-.00390	-.00720	.00840	.08390	-.05290	-.05380
4.591	4.570	-.01000	-.00360	-.00700	.00840	.08100	-.05330	-.05430
4.591	5.760	-.02000	-.00320	-.00690	.00850	.07830	-.05360	-.05480
4.591	6.970	-.03000	-.00280	-.00680	.00850	.07620	-.05390	-.05460
4.591	8.190	-.04000	-.00250	-.00670	.00850	.07430	-.05390	-.05480
4.591	9.420	-.04000	-.00230	-.00680	.00850	.07280	-.05380	-.05480
4.591	10.660	-.05000	-.00200	-.00680	.00850	.07140	-.05380	-.05480
4.591	11.910	-.06000	-.00170	-.00690	.00850	.07000	-.05360	-.05480
4.591	13.170	-.07000	-.00140	-.00690	.00850	.06860	-.05360	-.05500
4.591	14.430	-.08000	-.00090	-.00700	.00840	.06720	-.05330	-.05450
4.591	15.700	-.09000	-.00040	-.00710	.00840	.06570	-.05330	-.05430
4.591	16.990	-.09000	.00000	-.00720	.00840	.06440	-.05310	-.05450
4.591	18.280	-.10000	.00040	-.00720	.00840	.06310	-.05290	-.05450
4.591	19.570	-.11000	.00070	-.00740	.00840	.06220	-.05280	-.05390
4.591	20.880	-.12000	.00110	-.00750	.00830	.06120	-.05240	-.05390
4.591	22.200	-.13000	.00140	-.00770	.00830	.06020	-.05230	-.05390
4.591	23.540	-.14000	.00190	-.00770	.00830	.05940	-.05210	-.05380
4.591	24.890	-.14000	.00230	-.00790	.00830	.05870	-.05190	-.05380
4.591	26.240	-.15000	.00280	-.00820	.00820	.05810	-.05140	-.05320
4.591	27.600	-.16000	.00330	-.00850	.00810	.05730	-.05130	-.05290
4.591	28.980	-.17000	.00390	-.00880	.00820	.05650	-.05150	-.05310
4.591	30.300	-.18000	.00460	-.00900	.00810	.05590	-.05130	-.05290
4.591	31.440	-.18000	.00520	-.00920	.00810	.05530	-.05110	-.05310
4.591	32.210	-.19000	.00550	-.00940	.00820	.05490	-.05150	-.05290
4.591	32.480	-.19000	.00560	-.00940	.00820	.05410	-.05150	-.05330
4.591	32.700	-.19000	.00570	-.00950	.00830	.05400	-.05230	-.05340
	GRADIENT	-.00472	.00042	.00023	.00006	-.00270	-.00032	-.00042

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY045) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 66/ 0 RN/L = 14.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.710	.01000	-.00550	-.00880	.00690	.09880	-.04270	-.04620
4.591	-.100	.01000	-.00530	-.00850	.00700	.09640	-.04360	-.04670
4.591	.980	.00000	-.00470	-.00800	.00710	.09330	-.04440	-.04730
4.591	3.240	.00000	-.00400	-.00760	.00720	.09010	-.04460	-.04760
4.591	3.500	-.01000	-.00340	-.00730	.00730	.08660	-.04530	-.04780
4.591	4.740	-.01000	-.00320	-.00700	.00730	.08330	-.04590	-.04820
4.591	5.990	-.02000	-.00300	-.00670	.00740	.08040	-.04610	-.04870
4.591	7.230	-.03000	-.00280	-.00660	.00750	.07790	-.04680	-.04880
4.591	8.480	-.04000	-.00250	-.00660	.00750	.07620	-.04710	-.04930
4.591	9.730	-.04000	-.00230	-.00670	.00760	.07470	-.04750	-.04980
4.591	10.980	-.05000	-.00200	-.00670	.00770	.07290	-.04820	-.05040
4.591	12.240	-.06000	-.00150	-.00680	.00780	.07130	-.04880	-.05070
4.591	13.510	-.07000	-.00100	-.00670	.00790	.06980	-.04950	-.05140
4.591	14.770	-.08000	-.00050	-.00670	.00790	.06850	-.04970	-.05190
4.591	16.050	-.09000	.00000	-.00670	.00800	.06720	-.05030	-.05240
4.591	17.330	-.10000	.00060	-.00680	.00810	.06580	-.05080	-.05310
4.591	18.610	-.10000	.00100	-.00680	.00810	.06470	-.05100	-.05310
4.591	19.880	-.11000	.00140	-.00690	.00820	.06340	-.05150	-.05330
4.591	21.170	-.12000	.00180	-.00700	.00830	.06240	-.05200	-.05400
4.591	22.460	-.13000	.00210	-.00710	.00830	.06130	-.05210	-.05400
4.591	23.740	-.14000	.00240	-.00720	.00830	.06030	-.05230	-.05410
4.591	25.030	-.14000	.00270	-.00740	.00840	.05950	-.05260	-.05420
4.591	26.320	-.15000	.00320	-.00760	.00840	.05880	-.05260	-.05410
4.591	27.590	-.16000	.00370	-.00790	.00840	.05800	-.05260	-.05410
4.591	28.870	-.17000	.00420	-.00810	.00840	.05720	-.05280	-.05420
4.591	30.130	-.17000	.00480	-.00830	.00840	.05650	-.05280	-.05430
4.591	31.200	-.18000	.00530	-.00860	.00840	.05610	-.05280	-.05410
4.591	31.890	-.18000	.00570	-.00890	.00840	.05550	-.05230	-.05400
4.591	32.190	-.18000	.00580	-.00880	.00830	.05500	-.05230	-.05400
	GRADIENT	-.00406	.00045	.00033	.00007	-.00279	-.00053	-.00034

LTV-44-512 (LA-58) ORBITER MODEL 42-O (BWVFO) (AHY046) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1066/ 0 RN/L = 16.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.660	.02000	-.00570	-.00840	.00800	.09630	-.05030	-.05140
4.591	.170	.01000	-.00520	-.00800	.00810	.09370	-.05130	-.05150
4.591	1.070	.00000	-.00470	-.00780	.00810	.09130	-.05180	-.05200
4.591	2.010	.00000	-.00440	-.00760	.00820	.08870	-.05240	-.05260
4.591	2.980	.00000	-.00400	-.00740	.00840	.08610	-.05310	-.05330
4.591	3.950	-.01000	-.00370	-.00710	.00840	.08370	-.05330	-.05360
4.591	4.920	-.01000	-.00340	-.00690	.00850	.08110	-.05390	-.05450
4.591	5.920	-.02000	-.00320	-.00680	.00860	.07890	-.05460	-.05520
4.591	6.920	-.03000	-.00290	-.00670	.00870	.07710	-.05490	-.05570
4.591	7.950	-.03000	-.00270	-.00670	.00870	.07570	-.05540	-.05600
4.591	8.970	-.04000	-.00250	-.00670	.00880	.07450	-.05560	-.05600
4.591	10.010	-.05000	-.00220	-.00670	.00880	.07310	-.05570	-.05640
4.591	11.060	-.05000	-.00190	-.00670	.00880	.07180	-.05540	-.05640
4.591	12.100	-.06000	-.00160	-.00670	.00880	.07060	-.05580	-.05660
4.591	13.180	-.07000	-.00120	-.00670	.00870	.06940	-.05530	-.05620
4.591	14.260	-.08000	-.00080	-.00680	.00870	.06830	-.05510	-.05570
4.591	15.340	-.08000	-.00030	-.00680	.00870	.06700	-.05490	-.05570
4.591	16.440	-.09000	.00010	-.00680	.00860	.06580	-.05460	-.05570
4.591	17.540	-.10000	.00050	-.00680	.00850	.06460	-.05460	-.05520
4.591	18.650	-.10000	.00090	-.00690	.00860	.06370	-.05430	-.05480
4.591	19.770	-.11000	.00130	-.00700	.00850	.06280	-.05390	-.05470
4.591	20.890	-.12000	.00160	-.00710	.00850	.06190	-.05380	-.05450
4.591	22.020	-.13000	.00190	-.00720	.00840	.06100	-.05330	-.05430
4.591	23.170	-.13000	.00210	-.00730	.00840	.06030	-.05300	-.05400
4.591	24.320	-.14000	.00250	-.00740	.00840	.05960	-.05260	-.05410
4.591	25.480	-.15000	.00280	-.00750	.00830	.05890	-.05260	-.05380
4.591	26.660	-.15000	.00330	-.00770	.00830	.05820	-.05230	-.05360
4.591	27.830	-.16000	.00380	-.00790	.00830	.05760	-.05210	-.05380
4.591	28.960	-.17000	.00410	-.00810	.00820	.05700	-.05180	-.05330
4.591	30.240	-.17000	.00480	-.00840	.00820	.05620	-.05180	-.05310
4.591	31.590	-.18000	.00560	-.00860	.00820	.05550	-.05200	-.05330
4.591	32.230	-.18000	.00580	-.00880	.00830	.05530	-.05210	-.05330
	GRADIENT	-.00492	.00040	.00026	.00009	-.00270	-.00061	-.00057

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY047) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 65/ 0 RN/L = 15.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.850	.02000	-.00590	-.00840	.00730	.09770	-.04550	-.04790
4.591	.500	.01000	-.00540	-.00810	.00730	.09400	-.04610	-.04780
4.591	1.650	.00000	-.00460	-.00770	.00740	.09110	-.04650	-.04830
4.591	2.670	.00000	-.00420	-.00740	.00750	.08830	-.04700	-.04880
4.591	3.720	-.01000	-.00380	-.00720	.00750	.08550	-.04750	-.04900
4.591	4.780	-.01000	-.00350	-.00700	.00760	.08280	-.04770	-.04970
4.591	5.840	-.02000	-.00320	-.00680	.00770	.08020	-.04840	-.05010
4.591	6.900	-.03000	-.00300	-.00670	.00770	.07820	-.04870	-.05020
4.591	7.970	-.03000	-.00290	-.00670	.00780	.07660	-.04920	-.05090
4.591	9.040	-.04000	-.00250	-.00670	.00800	.07510	-.05000	-.05160
4.591	10.110	-.05000	-.00220	-.00670	.00800	.07370	-.05050	-.05210
4.591	11.190	-.06000	-.00190	-.00680	.00810	.07230	-.05100	-.05320
4.591	12.250	-.06000	-.00160	-.00680	.00820	.07100	-.05170	-.05380
4.591	13.330	-.07000	-.00130	-.00680	.00830	.06970	-.05220	-.05400
4.591	14.390	-.08000	-.00090	-.00680	.00840	.06830	-.05320	-.05450
4.591	15.470	-.08000	-.00040	-.00680	.00850	.06700	-.05350	-.05490
4.591	16.550	-.09000	.00010	-.00690	.00860	.06570	-.05420	-.05540
4.591	17.630	-.10000	.00050	-.00690	.00860	.06450	-.05420	-.05560
4.591	18.710	-.11000	.00090	-.00690	.00860	.06340	-.05450	-.05580
4.591	19.790	-.11000	.00120	-.00700	.00870	.06260	-.05470	-.05590
4.591	20.870	-.12000	.00160	-.00710	.00870	.06180	-.05470	-.05630
4.591	21.950	-.13000	.00190	-.00720	.00870	.06090	-.05500	-.05590
4.591	23.030	-.13000	.00210	-.00740	.00870	.06020	-.05480	-.05610
4.591	24.110	-.14000	.00240	-.00750	.00870	.05940	-.05500	-.05610
4.591	25.190	-.14000	.00260	-.00770	.00870	.05880	-.05480	-.05580
4.591	26.250	-.15000	.00300	-.00780	.00860	.05800	-.05480	-.05540
4.591	27.330	-.16000	.00350	-.00800	.00860	.05750	-.05450	-.05540
4.591	28.390	-.16000	.00390	-.00820	.00860	.05690	-.05450	-.05520
4.591	29.430	-.17000	.00420	-.00840	.00860	.05620	-.05400	-.05520
4.591	30.480	-.17000	.00480	-.00860	.00850	.05550	-.05400	-.05510
4.591	31.510	-.18000	.00550	-.00890	.00850	.05480	-.05370	-.05470
4.591	32.400	-.18000	.00590	-.00900	.00850	.05440	-.05350	-.05450
	GRADIENT	-.00545	.00044	.00028	.00006	-.00265	-.00040	-.00033

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY048) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1065/ 0 RN/L = 16.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.950	.02000	-.00600	-.00750	.00820	.09700	-.05230	-.05280
4.591	-.450	.01000	-.00570	-.00830	.00830	.09520	-.05280	-.05300
4.591	.410	.01000	-.00530	-.00800	.00840	.09250	-.05320	-.05330
4.591	1.430	.00000	-.00470	-.00780	.00840	.08970	-.05350	-.05400
4.591	2.480	.00000	-.00430	-.00750	.00850	.08700	-.05400	-.05430
4.591	3.570	.00000	-.00390	-.00730	.00850	.08420	-.05400	-.05490
4.591	4.680	-.01000	-.00360	-.00700	.00860	.08150	-.05460	-.05500
4.591	5.860	-.02000	-.00330	-.00690	.00860	.07900	-.05480	-.05520
4.591	7.060	-.03000	-.00300	-.00680	.00870	.07690	-.05500	-.05560
4.591	8.270	-.03000	-.00280	-.00680	.00870	.07520	-.05500	-.05590
4.591	9.490	-.04000	-.00250	-.00680	.00870	.07360	-.05500	-.05570
4.591	10.730	-.05000	-.00210	-.00680	.00870	.07210	-.05500	-.05570
4.591	11.960	-.06000	-.00170	-.00680	.00860	.07070	-.05460	-.05570
4.591	13.220	-.07000	-.00130	-.00680	.00860	.06920	-.05460	-.05540
4.591	14.490	-.08000	-.00070	-.00690	.00860	.06780	-.05450	-.05540
4.591	15.770	-.09000	-.00020	-.00690	.00860	.06630	-.05430	-.05520
4.591	17.060	-.09000	.00030	-.00690	.00850	.06500	-.05400	-.05490
4.591	18.350	-.10000	.00080	-.00700	.00850	.06370	-.05380	-.05450
4.591	19.650	-.11000	.00120	-.00710	.00850	.06270	-.05360	-.05450
4.591	20.950	-.12000	.00160	-.00720	.00850	.06170	-.05350	-.05440
4.591	22.290	-.13000	.00190	-.00730	.00840	.06070	-.05350	-.05420
4.591	23.640	-.13000	.00220	-.00750	.00840	.05980	-.05310	-.05420
4.591	24.990	-.14000	.00260	-.00760	.00840	.05890	-.05300	-.05400
4.591	26.350	-.15000	.00310	-.00790	.00830	.05820	-.05260	-.05400
4.591	27.710	-.16000	.00360	-.00810	.00830	.05740	-.05250	-.05400
4.591	29.060	-.17000	.00420	-.00840	.00830	.05660	-.05270	-.05400
4.591	30.380	-.17000	.00490	-.00860	.00830	.05600	-.05270	-.05380
4.591	31.460	-.18000	.00550	-.00880	.00830	.05530	-.05270	-.05380
4.591	32.210	-.18000	.00580	-.00890	.00840	.05500	-.05280	-.05400
4.591	32.700	-.19000	.00600	-.00910	.00840	.05430	-.05320	-.05400
	GRADIENT	-.00434	.00043	.00027	.00006	-.00273	-.00037	-.00042

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY049) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	930.6900 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 39/ 0 RN/L = 16.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.530	.00000	-.00010	.00060	.00500	.10830	-.04550	-.00730
4.591	1.740	.00000	.00000	.00050	.00510	.10450	-.04570	-.00980
4.591	2.720	-.01000	.00000	.00060	.00530	.10080	-.04640	-.01210
4.591	3.620	-.02000	-.00010	.00050	.00550	.09780	-.04670	-.01380
4.591	4.560	-.02000	-.00020	.00050	.00560	.09480	-.04700	-.01570
4.591	5.500	-.03000	-.00040	.00040	.00580	.09190	-.04770	-.01740
4.591	6.440	-.03000	-.00030	.00050	.00590	.08950	-.04800	-.01910
4.591	7.370	-.04000	-.00020	.00050	.00610	.08740	-.04880	-.02100
4.591	8.310	-.05000	-.00030	.00040	.00620	.08570	-.04930	-.02240
4.591	9.250	-.05000	-.00030	.00040	.00640	.08410	-.05010	-.02390
4.591	10.200	-.06000	-.00030	.00030	.00650	.08260	-.05080	-.02520
4.591	11.140	-.06000	-.00030	.00020	.00660	.08100	-.05110	-.02650
4.591	12.080	-.07000	-.00030	.00020	.00680	.07950	-.05210	-.02770
4.591	13.030	-.07000	-.00030	.00010	.00690	.07800	-.05260	-.02900
4.591	13.990	-.08000	-.00030	.00010	.00700	.07640	-.05310	-.03000
4.591	14.940	-.09000	-.00020	.00010	.00710	.07490	-.05340	-.03120
4.591	15.890	-.09000	-.00010	.00010	.00720	.07340	-.05390	-.03210
4.591	16.840	-.10000	.00000	.00010	.00730	.07190	-.05420	-.03330
4.591	17.790	-.11000	.00000	.00010	.00740	.07060	-.05460	-.03410
4.591	18.750	-.11000	.00000	.00010	.00750	.06940	-.05470	-.03500
4.591	19.700	-.12000	.00000	.00010	.00760	.06840	-.05490	-.03590
4.591	20.650	-.12000	.00000	.00010	.00760	.06750	-.05490	-.03640
4.591	21.600	-.13000	.00000	.00010	.00770	.06660	-.05520	-.03710
4.591	22.560	-.13000	-.00010	.00020	.00770	.06570	-.05520	-.03790
4.591	23.500	-.14000	-.00030	.00020	.00770	.06470	-.05520	-.03830
4.591	24.460	-.14000	-.00030	.00030	.00780	.06390	-.05520	-.03910
4.591	25.400	-.15000	-.00050	.00030	.00780	.06310	-.05520	-.03980
4.591	26.340	-.16000	-.00060	.00020	.00780	.06240	-.05520	-.04000
4.591	27.280	-.16000	-.00060	.00010	.00790	.06180	-.05510	-.04090
4.591	28.210	-.17000	-.00070	.00010	.00790	.06120	-.05520	-.04120
4.591	29.140	-.17000	-.00080	.00010	.00790	.06050	-.05510	-.04170
4.591	30.060	-.18000	-.00080	.00010	.00790	.05960	-.05490	-.04220
4.591	30.970	-.18000	-.00050	.00010	.00790	.05900	-.05470	-.04260
4.591	31.840	-.19000	-.00040	.00010	.00790	.05840	-.05470	-.04310
4.591	32.550	-.19000	-.00030	.00020	.00790	.05810	-.05470	-.04310
	GRADIENT	-.00596	-.00003	-.00002	.00016	-.00339	-.00040	-.00209

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY050) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0600 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 40/ 0 RN/L = 15.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.700	.00000	.00020	.00070	.00340	.10930	-.04590	.02110
4.591	2.170	-.01000	.00000	.00060	.00380	.10430	-.04660	.01540
4.591	3.540	-.02000	-.00010	.00050	.00410	.09960	-.04680	.01080
4.591	4.800	-.02000	-.00020	.00040	.00440	.09540	-.04730	.00640
4.591	6.090	-.03000	-.00020	.00040	.00470	.09170	-.04800	.00250
4.591	7.390	-.04000	-.00020	.00050	.00490	.08860	-.04850	-.00070
4.591	8.690	-.05000	-.00030	.00040	.00520	.08620	-.04910	-.00390
4.591	9.990	-.06000	-.00030	.00030	.00540	.08390	-.05000	-.00680
4.591	11.290	-.06000	-.00030	.00020	.00570	.08180	-.05080	-.00970
4.591	12.600	-.07000	-.00030	.00020	.00590	.07970	-.05140	-.01230
4.591	13.910	-.08000	-.00030	.00010	.00610	.07750	-.05230	-.01460
4.591	15.230	-.09000	-.00020	.00010	.00630	.07530	-.05290	-.01650
4.591	16.550	-.10000	.00000	.00010	.00640	.07330	-.05340	-.01870
4.591	17.860	-.11000	.00000	.00020	.00660	.07130	-.05390	-.02070
4.591	19.190	-.11000	.00000	.00020	.00670	.06990	-.05390	-.02200
4.591	20.510	-.12000	.00000	.00010	.00680	.06850	-.05420	-.02370
4.591	21.830	-.13000	-.00010	.00020	.00690	.06710	-.05440	-.02530
4.591	23.150	-.14000	-.00020	.00020	.00700	.06580	-.05470	-.02670
4.591	24.480	-.14000	-.00040	.00030	.00710	.06450	-.05470	-.02790
4.591	25.790	-.15000	-.00060	.00030	.00720	.06350	-.05470	-.02910
4.591	27.110	-.16000	-.00060	.00020	.00720	.06260	-.05470	-.03030
4.591	28.420	-.17000	-.00070	.00020	.00730	.06180	-.05470	-.03120
4.591	29.710	-.17000	-.00080	.00020	.00730	.06060	-.05470	-.03220
4.591	31.000	-.18000	-.00060	.00020	.00740	.05950	-.05460	-.03330
4.591	32.200	-.19000	-.00040	.00020	.00740	.05880	-.05440	-.03400
4.591	32.760	-.19000	-.00040	.00030	.00750	.05830	-.05460	-.03500
	GRADIENT	-.00517	-.00010	-.00007	.00024	-.00339	-.00032	-.00357

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY051) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	2.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1040/ 0 RN/L = 16.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.170	.00000	.00000	.00080	.00780	.10680	-.05190	-.04570
4.591	.950	.00000	.00010	.00070	.00790	.10400	-.05260	-.04580
4.591	2.080	-.01000	.00000	.00050	.00790	.10010	-.05320	-.04570
4.591	3.260	-.01000	-.00010	.00050	.00800	.09620	-.05390	-.04530
4.591	4.420	-.02000	-.00030	.00050	.00810	.09240	-.05470	-.04550
4.591	5.620	-.03000	-.00030	.00040	.00810	.08910	-.05520	-.04520
4.591	6.850	-.04000	-.00020	.00050	.00810	.08630	-.05550	-.04480
4.591	8.090	-.04000	-.00030	.00040	.00820	.08400	-.05590	-.04470
4.591	9.350	-.05000	-.00030	.00030	.00820	.08210	-.05620	-.04410
4.591	10.610	-.06000	-.00030	.00020	.00820	.08010	-.05640	-.04400
4.591	11.890	-.07000	-.00030	.00020	.00810	.07830	-.05600	-.04340
4.591	13.190	-.08000	-.00030	.00010	.00810	.07640	-.05600	-.04310
4.591	14.500	-.08000	-.00030	.00010	.00800	.07440	-.05590	-.04260
4.591	15.810	-.09000	-.00010	.00010	.00800	.07250	-.05570	-.04220
4.591	17.160	-.10000	.00000	.00010	.00800	.07070	-.05550	-.04170
4.591	18.500	-.11000	.00000	.00020	.00790	.06920	-.05540	-.04140
4.591	19.860	-.12000	.00000	.00010	.00790	.06790	-.05510	-.04090
4.591	21.240	-.13000	.00000	.00010	.00780	.06660	-.05470	-.04030
4.591	22.610	-.13000	-.00020	.00020	.00780	.06530	-.05470	-.04000
4.591	24.000	-.14000	-.00040	.00030	.00770	.06430	-.05470	-.03910
4.591	25.420	-.15000	-.00070	.00020	.00770	.06340	-.05440	-.03880
4.591	26.860	-.16000	-.00060	.00020	.00760	.06250	-.05420	-.03830
4.591	28.180	-.17000	-.00070	.00020	.00760	.06160	-.05410	-.03740
4.591	29.650	-.17000	-.00080	.00020	.00750	.06020	-.05410	-.03670
4.591	31.490	-.18000	-.00050	.00040	.00750	.05930	-.05390	-.03600
4.591	32.580	-.19000	-.00040	.00040	.00750	.05850	-.05410	-.03550
	GRADIENT	-.00456	-.00008	-.00007	.00006	-.00338	-.00064	.00009

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY052) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6900 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	3.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 41/ 0 RN/L = 15.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.400	.00000	.00000	.00070	.00720	.10660	-.04560	-.04560
4.591	.730	.00000	.00010	.00070	.00720	.10580	-.04560	-.04560
4.591	1.620	.00000	.00010	.00070	.00720	.10280	-.04580	-.04580
4.591	2.830	-.01000	.00000	.00060	.00720	.09900	-.04590	-.04590
4.591	4.110	-.02000	-.00020	.00060	.00720	.09490	-.04610	-.04610
4.591	5.360	-.03000	-.00030	.00050	.00730	.09120	-.04640	-.04640
4.591	6.610	-.03000	-.00030	.00050	.00740	.08810	-.04690	-.04690
4.591	7.860	-.04000	-.00030	.00050	.00740	.08550	-.04710	-.04710
4.591	9.110	-.05000	-.00030	.00040	.00750	.08340	-.04760	-.04760
4.591	10.350	-.06000	-.00030	.00040	.00760	.08140	-.04810	-.04810
4.591	11.610	-.07000	-.00030	.00030	.00760	.07940	-.04860	-.04860
4.591	12.870	-.07000	-.00030	.00020	.00770	.07740	-.04920	-.04920
4.591	14.150	-.08000	-.00030	.00020	.00780	.07540	-.04970	-.04970
4.591	15.420	-.09000	-.00020	.00020	.00790	.07350	-.05010	-.05010
4.591	16.700	-.10000	.00000	.00020	.00800	.07160	-.05090	-.05090
4.591	17.980	-.11000	.00000	.00020	.00800	.06970	-.05120	-.05120
4.591	19.260	-.11000	.00000	.00020	.00810	.06840	-.05150	-.05150
4.591	20.540	-.12000	.00000	.00020	.00810	.06710	-.05170	-.05170
4.591	21.830	-.13000	-.00010	.00020	.00820	.06590	-.05200	-.05200
4.591	23.120	-.14000	-.00020	.00030	.00820	.06470	-.05220	-.05220
4.591	24.410	-.14000	-.00040	.00040	.00830	.06350	-.05250	-.05250
4.591	25.700	-.15000	-.00060	.00030	.00830	.06240	-.05250	-.05250
4.591	26.990	-.16000	-.00060	.00030	.00830	.06160	-.05270	-.05270
4.591	28.260	-.17000	-.00070	.00020	.00830	.06080	-.05280	-.05280
4.591	29.540	-.17000	-.00080	.00020	.00830	.05990	-.05280	-.05280
4.591	30.750	-.18000	-.00070	.00020	.00830	.05920	-.05300	-.05300
4.591	31.670	-.18000	-.00050	.00020	.00830	.05870	-.05300	-.05300
4.591	32.180	-.19000	-.00040	.00020	.00830	.05820	-.05300	-.05300
	GRADIENT	-.00555	-.00006	-.00003	.00000	-.00318	-.00014	-.00014

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY053) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	4.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1041/ 0 RN/L = 16.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.460	.00000	.00000	.00070	.00780	.10580	-.04970	-.04970
4.591	1.140	.00000	.00000	.00070	.00790	.10340	-.05020	-.05020
4.591	1.930	.00000	.00000	.00060	.00800	.10070	-.05070	-.05070
4.591	2.760	-.01000	.00000	.00050	.00810	.09790	-.05150	-.05150
4.591	3.590	-.02000	-.00010	.00050	.00820	.09500	-.05220	-.05220
4.591	4.430	-.02000	-.00020	.00050	.00830	.09230	-.05300	-.05300
4.591	5.290	-.03000	-.00030	.00050	.00840	.08980	-.05350	-.05350
4.591	6.150	-.03000	-.00030	.00050	.00850	.08750	-.05420	-.05420
4.591	7.030	-.04000	-.00020	.00050	.00860	.08560	-.05480	-.05480
4.591	7.940	-.04000	-.00020	.00050	.00860	.08400	-.05500	-.05500
4.591	8.810	-.05000	-.00030	.00040	.00870	.08250	-.05530	-.05530
4.591	9.710	-.05000	-.00030	.00040	.00870	.08110	-.05550	-.05550
4.591	10.640	-.06000	-.00030	.00030	.00870	.07960	-.05560	-.05560
4.591	11.570	-.07000	-.00030	.00020	.00880	.07830	-.05580	-.05580
4.591	12.460	-.07000	-.00030	.00020	.00870	.07700	-.05550	-.05550
4.591	13.430	-.08000	-.00030	.00020	.00870	.07550	-.05550	-.05550
4.591	14.370	-.08000	-.00030	.00020	.00870	.07390	-.05530	-.05530
4.591	15.320	-.09000	-.00020	.00010	.00860	.07280	-.05500	-.05500
4.591	16.280	-.10000	.00000	.00010	.00860	.07130	-.05500	-.05500
4.591	17.250	-.10000	.00000	.00020	.00860	.07000	-.05500	-.05500
4.591	18.230	-.11000	.00000	.00020	.00860	.06890	-.05450	-.05450
4.591	19.210	-.11000	.00000	.00020	.00860	.06790	-.05450	-.05450
4.591	20.180	-.12000	.00000	.00020	.00850	.06700	-.05430	-.05430
4.591	21.180	-.13000	.00000	.00020	.00850	.06610	-.05400	-.05400
4.591	22.200	-.13000	-.00020	.00020	.00850	.06520	-.05400	-.05400
4.591	23.200	-.14000	-.00030	.00030	.00850	.06430	-.05380	-.05380
4.591	24.180	-.14000	-.00050	.00030	.00840	.06360	-.05370	-.05370
4.591	25.230	-.15000	-.00070	.00020	.00840	.06290	-.05370	-.05370
4.591	26.280	-.15000	-.00070	.00020	.00840	.06220	-.05330	-.05330
4.591	27.300	-.16000	-.00060	.00020	.00840	.06160	-.05320	-.05320
4.591	28.310	-.17000	-.00070	.00020	.00830	.06090	-.05280	-.05280
4.591	29.350	-.17000	-.00090	.00020	.00830	.06000	-.05280	-.05280
4.591	30.450	-.18000	-.00070	.00030	.00830	.05910	-.05280	-.05280
4.591	31.650	-.19000	-.00050	.00030	.00830	.05840	-.05300	-.05300
4.591	32.320	-.19000	-.00050	.00020	.00830	.05810	-.05280	-.05280
	GRADIENT	-.00612	-.00005	-.00006	.00012	-.00341	-.00083	-.00083

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY054) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 43/ 0 RN/L = 16.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.480	.00000	.00000	.00070	.00530	.10910	-.02580	-.04770
4.591	1.690	.00000	.00000	.00060	.00550	.10490	-.02760	-.04790
4.591	2.690	-.01000	-.00010	.00050	.00570	.10120	-.02910	-.04880
4.591	3.580	-.02000	-.00020	.00050	.00580	.09810	-.03060	-.04900
4.591	4.520	-.02000	-.00020	.00050	.00600	.09510	-.03190	-.04950
4.591	5.460	-.03000	-.00030	.00050	.00610	.09210	-.03310	-.04980
4.591	6.390	-.03000	-.00030	.00050	.00630	.08970	-.03440	-.05030
4.591	7.330	-.04000	-.00030	.00050	.00650	.08750	-.03570	-.05100
4.591	8.270	-.04000	-.00040	.00050	.00660	.08580	-.03670	-.05150
4.591	9.210	-.05000	-.00040	.00040	.00680	.08430	-.03800	-.05220
4.591	10.140	-.06000	-.00040	.00030	.00690	.08270	-.03900	-.05290
4.591	11.090	-.06000	-.00040	.00030	.00700	.08130	-.04000	-.05340
4.591	12.030	-.07000	-.00040	.00020	.00720	.07980	-.04080	-.05410
4.591	12.980	-.07000	-.00040	.00020	.00730	.07810	-.04180	-.05460
4.591	13.930	-.08000	-.00040	.00020	.00740	.07610	-.04260	-.05520
4.591	14.890	-.09000	-.00030	.00030	.00750	.07420	-.04310	-.05550
4.591	15.830	-.09000	-.00020	.00030	.00750	.07240	-.04380	-.05570
4.591	16.790	-.10000	-.00010	.00020	.00760	.07140	-.04440	-.05580
4.591	17.740	-.10000	.00000	.00020	.00770	.07040	-.04530	-.05620
4.591	18.690	-.11000	.00000	.00020	.00780	.06950	-.04580	-.05650
4.591	19.630	-.12000	.00000	.00020	.00780	.06870	-.04630	-.05650
4.591	20.590	-.12000	-.00010	.00020	.00790	.06770	-.04670	-.05650
4.591	21.540	-.13000	-.00020	.00020	.00800	.06670	-.04720	-.05670
4.591	22.490	-.13000	-.00040	.00020	.00800	.06570	-.04770	-.05690
4.591	23.440	-.14000	-.00050	.00030	.00800	.06480	-.04810	-.05650
4.591	24.380	-.14000	-.00060	.00040	.00800	.06390	-.04820	-.05650
4.591	25.320	-.15000	-.00070	.00040	.00810	.06320	-.04840	-.05650
4.591	26.270	-.15000	-.00080	.00030	.00810	.06250	-.04860	-.05650
4.591	27.200	-.16000	-.00070	.00030	.00810	.06210	-.04890	-.05650
4.591	28.140	-.16000	-.00070	.00020	.00820	.06160	-.04920	-.05670
4.591	29.060	-.17000	-.00080	.00020	.00810	.06090	-.04920	-.05650
4.591	29.990	-.18000	-.00090	.00020	.00820	.06010	-.04940	-.05650
4.591	30.890	-.19000	-.00070	.00020	.00820	.05950	-.04970	-.05650
4.591	31.770	-.19000	-.00050	.00020	.00820	.05880	-.04970	-.05620
4.591	32.510	-.19000	-.00050	.00020	.00820	.05840	-.04970	-.05620
	GRADIENT	-.00594	-.00006	-.00005	.00017	-.00349	-.00152	-.00047

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY055) (19 JAN 76)

REFERENCE DATA

SREF	= 2690.0000 SQ.FT.	XMRP	= 1076.7000 IN.	XO	
LREF	= 474.8100 INCHES	YMRP	= .0000 IN.	YO	
BREF	= 936.0800 INCHES	ZMRP	= 375.0000 IN.	ZO	
SCALE	= .0150				

PARAMETRIC DATA

ELEVON =	-40.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1043/ 0 RN/L = 16.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CRC
4.591	300	.00000	.00000	.00070	.00800	.10630	-.04970	-.05370
4.591	.740	.00000	.00000	.00060	.00810	.10470	-.04980	-.05410
4.591	1.550	.00000	.00000	.00060	.00810	.10190	-.05030	-.05460
4.591	2.550	-.01000	.00000	.00050	.00820	.09840	-.05070	-.05530
4.591	3.630	-.01000	-.00020	.00050	.00830	.09480	-.05100	-.05570
4.591	4.760	-.02000	-.00030	.00050	.00830	.09140	-.05120	-.05620
4.591	5.940	-.03000	-.00030	.00050	.00840	.08830	-.05170	-.05630
4.591	7.140	-.04000	-.00030	.00050	.00840	.08570	-.05170	-.05690
4.591	8.350	-.04000	-.00030	.00040	.00840	.08370	-.05170	-.05690
4.591	9.570	-.05000	-.00040	.00030	.00840	.08180	-.05150	-.05690
4.591	10.810	-.06000	-.00040	.00020	.00840	.07990	-.05150	-.05690
4.591	12.060	-.07000	-.00040	.00020	.00840	.07810	-.05150	-.05670
4.591	13.320	-.08000	-.00040	.00020	.00840	.07590	-.05120	-.05690
4.591	14.600	-.08000	-.00030	.00020	.00830	.07340	-.05100	-.05670
4.591	15.880	-.09000	-.00020	.00030	.00830	.07120	-.05080	-.05650
4.591	17.170	-.10000	-.00010	.00020	.00830	.06990	-.05080	-.05630
4.591	18.460	-.11000	.00000	.00020	.00830	.06890	-.05070	-.05620
4.591	19.770	-.12000	-.00010	.00010	.00830	.06780	-.05070	-.05620
4.591	21.080	-.12000	-.00020	.00020	.00820	.06650	-.05030	-.05600
4.591	22.430	-.13000	-.00040	.00020	.00820	.06530	-.05030	-.05580
4.591	23.760	-.14000	-.00070	.00030	.00820	.06420	-.05020	-.05580
4.591	25.090	-.15000	-.00090	.00020	.00820	.06320	-.05020	-.05570
4.591	26.430	-.16000	-.00080	.00020	.00820	.06240	-.05020	-.05580
4.591	27.740	-.16000	-.00080	.00030	.00820	.06160	-.05020	-.05570
4.591	29.080	-.17000	-.00080	.00030	.00810	.06090	-.04990	-.05550
4.591	30.380	-.18000	-.00080	.00030	.00820	.06010	-.04990	-.05570
4.591	31.460	-.18000	-.00060	.00030	.00820	.05940	-.04990	-.05550
4.591	32.210	-.19000	-.00050	.00030	.00820	.05910	-.04990	-.05570
4.591	32.680	-.19000	-.00050	.00030	.00820	.05830	-.04990	-.05580
	GRADIENT	-.00449	-.00007	-.00004	.00007	-.00336	-.00035	-.00055

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY056) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 52/ 0 RN/L = 16.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.360	.00000	.00000	.00020	.00700	.0896J	-.04350	-.04660
4.591	1.700	.00000	.00000	.00020	.00710	.08710	-.04400	-.04710
4.591	2.830	-.01000	-.00010	.00020	.00720	.08540	-.04460	-.04730
4.591	3.840	-.02000	-.00030	.00030	.00720	.08410	-.04540	-.04740
4.591	4.880	-.02000	-.00030	.00040	.00730	.08290	-.04570	-.04790
4.591	5.920	-.03000	-.00040	.00040	.00740	.08160	-.04620	-.04850
4.591	6.960	-.04000	-.00040	.00020	.00750	.08110	-.04720	-.04900
4.591	8.010	-.04000	-.00020	.00020	.00760	.08030	-.04760	-.04930
4.591	9.080	-.05000	.00000	.00020	.00770	.07980	-.04810	-.05000
4.591	10.120	-.06000	-.00010	.00020	.00780	.07930	-.04870	-.05050
4.591	11.180	-.06000	-.00010	.00010	.00780	.07910	-.04920	-.05110
4.591	12.230	-.07000	-.00010	.00010	.00790	.07880	-.04990	-.05140
4.591	13.300	-.08000	-.00020	.00000	.00800	.07860	-.05020	-.05170
4.591	14.350	-.08000	-.00030	.00000	.00800	.07860	-.05050	-.05190
4.591	15.400	-.09000	-.00020	.00000	.00800	.07870	-.05030	-.05210
4.591	16.470	-.10000	-.00010	.00000	.00800	.07880	-.05050	-.05230
4.591	17.530	-.10000	-.00010	.00000	.00800	.07910	-.05050	-.05170
4.591	18.590	-.11000	-.00020	.00000	.00800	.07940	-.05050	-.05190
4.591	19.650	-.12000	-.00020	.00000	.00800	.07980	-.05070	-.05190
4.591	20.710	-.12000	-.00020	.00000	.00800	.08030	-.05070	-.05210
4.591	21.780	-.13000	-.00030	.00000	.00810	.08080	-.05100	-.05230
4.591	22.840	-.13000	-.00040	.00000	.00810	.08150	-.05120	-.05190
4.591	23.900	-.14000	-.00060	.00000	.00810	.08230	-.05080	-.05230
4.591	24.960	-.15000	-.00070	.00000	.00810	.08300	-.05080	-.05210
4.591	26.010	-.15000	-.00070	.00000	.00800	.08380	-.05080	-.05170
4.591	27.070	-.16000	-.00060	.00000	.00800	.08450	-.05080	-.05170
4.591	28.110	-.17000	-.00050	.00000	.00800	.08510	-.05080	-.05140
4.591	29.150	-.17000	-.00060	.00000	.00800	.08570	-.05080	-.05140
4.591	30.180	-.18000	-.00060	.00000	.00800	.08640	-.05070	-.05100
4.591	31.200	-.18000	-.00030	.00000	.00800	.08710	-.05080	-.05100
4.591	32.140	-.19000	-.00030	.00000	.00800	.08770	-.05050	-.05100
	GRADIENT	-.00531	-.00008	.00004	.00006	-.00148	-.00052	-.00026

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY057) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 51/ 0 RN/L = 16.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CRB	CPC
4.591	.310	.00000	-.00050	-.00010	.00730	.08890	-.04520	-.04890
4.591	1.650	.00000	-.00060	-.00020	.00740	.08660	-.04600	-.04920
4.591	2.790	-.01000	-.00060	-.00010	.00750	.08500	-.04660	-.04970
4.591	3.790	-.02000	-.00050	-.00020	.00760	.08370	-.04730	-.04970
4.591	4.850	-.02000	-.00070	-.00020	.00760	.08210	-.04760	-.05020
4.591	5.880	-.03000	-.00090	-.00020	.00770	.08070	-.04830	-.05060
4.591	6.940	-.04000	-.00090	-.00030	.00780	.07980	-.04880	-.05110
4.591	7.990	-.04000	-.00080	-.00020	.00790	.07930	-.04960	-.05160
4.591	9.040	-.05000	-.00080	-.00030	.00800	.07870	-.04990	-.05210
4.591	10.080	-.06000	-.00070	-.00020	.00810	.07830	-.05060	-.05240
4.591	11.140	-.06000	-.00060	-.00020	.00810	.07810	-.05090	-.05280
4.591	12.200	-.07000	-.00050	-.00030	.00820	.07800	-.05160	-.05350
4.591	13.260	-.08000	-.00060	-.00030	.00830	.07790	-.05200	-.05350
4.591	14.310	-.08000	-.00050	-.00030	.00830	.07800	-.05220	-.05420
4.591	15.370	-.09000	-.00040	-.00030	.00830	.07810	-.05220	-.05420
4.591	16.440	-.10000	-.00030	-.00030	.00840	.07810	-.05250	-.05430
4.591	17.500	-.10000	-.00030	-.00030	.00840	.07830	-.05270	-.05450
4.591	18.550	-.11000	-.00030	-.00030	.00830	.07860	-.05250	-.05420
4.591	19.620	-.12000	-.00020	-.00030	.00840	.07910	-.05270	-.05430
4.591	20.680	-.12000	-.00020	-.00020	.00840	.07960	-.05300	-.05450
4.591	21.750	-.13000	-.00030	-.00020	.00840	.08020	-.05300	-.05450
4.591	22.810	-.13000	-.00040	-.00010	.00840	.08090	-.05300	-.05430
4.591	23.860	-.14000	-.00060	-.00010	.00840	.08160	-.05300	-.05450
4.591	24.920	-.15000	-.00080	.00000	.00840	.08230	-.05300	-.05470
4.591	25.990	-.15000	-.00080	.00000	.00840	.08300	-.05300	-.05450
4.591	27.050	-.16000	-.00070	.00000	.00840	.08370	-.05300	-.05430
4.591	28.070	-.16000	-.00070	.00000	.00840	.08450	-.05300	-.05420
4.591	29.110	-.17000	-.00080	.00000	.00840	.08510	-.05290	-.05400
4.591	30.150	-.18000	-.00080	.00000	.00840	.08590	-.05290	-.05380
4.591	31.160	-.18000	-.00050	-.00010	.00830	.08660	-.05270	-.05380
4.591	32.110	-.19000	-.00050	-.00010	.00830	.08740	-.05240	-.05330
4.591	32.640	-.19000	-.00050	-.00020	.00820	.08790	-.05220	-.05290
	GRADIENT	-.00529	-.00003	-.00002	.00007	-.00147	-.00054	-.00028

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY058) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	30.000		

RUN NO. 61/ 0 RN/L = 15.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	QAF	CPB	CPC
4.591	.690	-5.22000	-.00920	-.00690	.00760	.09890	-.04780	-.04990
4.591	1.910	-4.54000	-.00770	-.00610	.00770	.09470	-.04830	-.05010
4.591	2.880	-4.01000	-.00690	-.00560	.00780	.09130	-.04900	-.05050
4.591	3.780	-3.51000	-.00620	-.00520	.00780	.08860	-.04930	-.05080
4.591	4.700	-3.00000	-.00520	-.00500	.00790	.08590	-.04950	-.05100
4.591	5.620	-2.49000	-.00440	-.00480	.00790	.08310	-.04980	-.05120
4.591	6.540	-1.98000	-.00390	-.00480	.00790	.08090	-.05000	-.05140
4.591	7.470	-1.46000	-.00320	-.00490	.00800	.07900	-.05030	-.05170
4.591	8.400	-.95000	-.00270	-.00510	.00800	.07760	-.05050	-.05190
4.591	9.330	-.43000	-.00250	-.00540	.00800	.07630	-.05060	-.05220
4.591	10.250	.07000	-.00230	-.00590	.00810	.07480	-.05130	-.05270
4.591	11.190	.59000	-.00180	-.00640	.00820	.07350	-.05190	-.05310
4.591	12.120	1.11000	-.00140	-.00710	.00830	.07210	-.05230	-.05380
4.591	13.050	1.62000	-.00100	-.00780	.00840	.07080	-.05280	-.05430
4.591	13.990	2.14000	-.00080	-.00860	.00850	.06970	-.05340	-.05460
4.591	14.920	2.65000	-.00070	-.00940	.00850	.06830	-.05380	-.05480
4.591	15.870	3.17000	-.00030	-.01040	.00860	.06680	-.05420	-.05520
4.591	16.810	3.69000	-.00020	-.01140	.00860	.06530	-.05460	-.05570
4.591	17.750	4.20000	-.00030	-.01250	.00870	.06430	-.05490	-.05580
4.591	18.690	4.71000	-.00060	-.01370	.00870	.06320	-.05510	-.05620
4.591	19.630	5.22000	-.00090	-.01500	.00880	.06220	-.05560	-.05620
4.591	20.580	5.74000	-.00110	-.01630	.00880	.06130	-.05560	-.05640
4.591	21.520	6.24000	-.00100	-.01770	.00880	.06060	-.05590	-.05650
4.591	22.460	6.74000	-.00100	-.01920	.00880	.06010	-.05610	-.05670
4.591	23.410	7.24000	-.00110	-.02080	.00890	.05990	-.05640	-.05690
4.591	24.360	7.75000	-.00130	-.02240	.00890	.05970	-.05650	-.05690
4.591	25.300	8.24000	-.00130	-.02410	.00890	.05960	-.05660	-.05710
4.591	26.240	8.72000	-.00120	-.02580	.00890	.05940	-.05640	-.05720
4.591	27.180	9.21000	-.00080	-.02760	.00890	.05920	-.05640	-.05710
4.591	28.110	9.68000	-.00020	-.02960	.00890	.05890	-.05660	-.05710
4.591	29.010	10.14000	.00050	-.03150	.00890	.05850	-.05640	-.05710
4.591	29.760	10.52000	.00120	-.03320	.00890	.05850	-.05640	-.05670
	GRADIENT	.55311	.00096	.00048	.00007	-.00325	-.00045	-.00029

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY059) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	30.000		

RUN NO. 1061/ 0 RN/L = 16.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.310	-5.42000	-.00930	-.00710	.00850	.09890	-.05400	-.05430
4.591	.550	-5.29000	-.00900	-.00690	.00850	.09800	-.05440	-.05430
4.591	1.120	-4.98000	-.00830	-.00650	.00860	.09590	-.05450	-.05480
4.591	1.960	-4.51000	-.00750	-.00600	.00860	.09280	-.05470	-.05500
4.591	2.870	-4.01000	-.00660	-.00550	.00870	.08980	-.05500	-.05510
4.591	3.800	-3.50000	-.00580	-.00520	.00870	.08680	-.05540	-.05550
4.591	4.770	-2.96000	-.00490	-.00490	.00870	.08400	-.05550	-.05580
4.591	5.760	-2.41000	-.00410	-.00480	.00880	.08130	-.05600	-.05620
4.591	6.800	-1.84000	-.00340	-.00480	.00880	.07910	-.05620	-.05630
4.591	7.870	-1.24000	-.00270	-.00500	.00890	.07720	-.05650	-.05650
4.591	8.920	-.66000	-.00240	-.00530	.00890	.07570	-.05690	-.05690
4.591	9.990	-.06000	-.00210	-.00580	.00890	.07430	-.05690	-.05700
4.591	11.090	.53000	-.00160	-.00650	.00890	.07270	-.05690	-.05700
4.591	12.180	1.14000	-.00110	-.00730	.00900	.07130	-.05690	-.05720
4.591	13.280	1.75000	-.00080	-.00810	.00890	.06990	-.05690	-.05700
4.591	14.390	2.36000	-.00050	-.00910	.00900	.06840	-.05700	-.05700
4.591	15.510	2.98000	-.00020	-.01020	.00900	.06660	-.05700	-.05720
4.591	16.630	3.59000	-.00010	-.01140	.00900	.06500	-.05700	-.05700
4.591	17.770	4.21000	-.00020	-.01270	.00900	.06350	-.05690	-.05720
4.591	18.910	4.83000	-.00040	-.01410	.00890	.06230	-.05690	-.05690
4.591	20.080	5.47000	-.00080	-.01570	.00890	.06140	-.05650	-.05700
4.591	21.270	6.11000	-.00100	-.01750	.00890	.06070	-.05650	-.05700
4.591	22.460	6.74000	-.00110	-.01940	.00890	.06020	-.05650	-.05670
4.591	23.640	7.37000	-.00130	-.02140	.00890	.05990	-.05650	-.05650
4.591	24.840	7.99000	-.00140	-.02340	.00890	.05980	-.05650	-.05650
4.591	26.010	8.60000	-.00130	-.02560	.00890	.05950	-.05650	-.05650
4.591	27.200	9.21000	-.00080	-.02790	.00890	.05940	-.05650	-.05670
4.591	28.290	9.77000	.00000	-.03010	.00890	.05920	-.05640	-.05650
4.591	29.170	10.22000	.00060	-.03190	.00890	.05890	-.05640	-.05670
4.591	29.730	10.50000	.00120	-.03310	.00890	.05880	-.05650	-.05650
4.591	29.930	10.60000	.00130	-.03360	.00890	.05840	-.05640	-.05670
	GRADIENT	.55168	.00098	.00050	.00005	-.00337	-.00032	-.00033

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY060) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	-30.000		

RUN NO. 62/ 0 · RN/L = 15.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.760	5.23000	-.00010	-.00810	.00760	.09120	-.04790	-.04990
4.591	1.970	4.54000	-.00030	-.00830	.00770	.08870	-.04840	-.05030
4.591	2.930	4.00000	-.00060	-.00810	.00780	.08590	-.04900	-.05070
4.591	3.830	3.49000	-.00080	-.00800	.00780	.08370	-.04900	-.05120
4.591	4.740	2.97000	-.00080	-.00800	.00780	.08180	-.04880	-.05120
4.591	5.660	2.44000	-.00100	-.00780	.00790	.07990	-.04910	-.05150
4.591	6.570	1.92000	-.00120	-.00780	.00791	.07820	-.04960	-.05170
4.591	7.490	1.39000	-.00140	-.00770	.00790	.07690	-.04960	-.05190
4.591	8.410	.87000	-.00160	-.00760	.00800	.07600	-.05030	-.05260
4.591	9.320	.34000	-.00150	-.00740	.00810	.07500	-.05090	-.05280
4.591	10.250	-.18000	-.00140	-.00710	.00820	.07380	-.05110	-.05330
4.591	11.170	-.70000	-.00130	-.00660	.00820	.07270	-.05140	-.05360
4.591	12.090	-1.23000	-.00120	-.00610	.00820	.07160	-.05180	-.05380
4.591	13.020	-1.75000	-.00100	-.00540	.00830	.07070	-.05230	-.05410
4.591	13.950	-2.29000	-.00050	-.00460	.00840	.06980	-.05280	-.05450
4.591	14.890	-2.82000	.00010	-.00390	.00850	.06890	-.05330	-.05500
4.591	15.820	-3.35000	.00050	-.00300	.00850	.06770	-.05360	-.05520
4.591	16.760	-3.88000	.00090	-.00200	.00860	.06660	-.05390	-.05550
4.591	17.680	-4.40000	.00160	-.00110	.00860	.06550	-.05440	-.05570
4.591	18.630	-4.93000	.00240	-.00020	.00860	.06460	-.05460	-.05570
4.591	19.560	-5.45000	.00320	.00070	.00860	.06400	-.05460	-.05550
4.591	20.500	-5.97000	.00400	.00180	.00870	.06320	-.05490	-.05570
4.591	21.440	-6.49000	.00460	.00290	.00870	.06280	-.05490	-.05580
4.591	22.390	-7.00000	.00510	.00420	.00870	.06230	-.05510	-.05580
4.591	23.330	-7.52000	.00560	.00550	.00870	.06200	-.05510	-.05590
4.591	24.270	-8.02000	.00620	.00670	.00870	.06180	-.05510	-.05580
4.591	25.210	-8.53000	.00670	.00800	.00870	.06180	-.05520	-.05600
4.591	26.140	-9.03000	.00710	.00940	.00870	.06180	-.05520	-.05570
4.591	27.070	-9.52000	.00730	.01080	.00870	.06170	-.05510	-.05570
4.591	28.000	-10.01000	.00730	.01240	.00870	.06160	-.05510	-.05570
4.591	28.300	-10.48000	.00710	.01410	.00870	.06130	-.05490	-.05570
4.591	29.660	-10.87000	.00710	.01550	.00870	.06110	-.05490	-.05580
	GRADIENT	-.56722	-.00019	.00005	.00005	-.00242	-.00025	-.00036

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF0) (AHY061) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	-30.000		

RUN NO. 1062/ 0 RN/L = 16.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CRB	CPC
4.591	.380	5.45000	-.00010	-.00830	.00840	.09140	-.05320	-.05440
4.591	.600	5.32000	-.00020	-.00830	.00840	.09090	-.05320	-.05460
4.591	1.140	5.02000	-.00040	-.00830	.00850	.08950	-.05340	-.05460
4.591	1.950	4.56000	-.00060	-.00830	.00850	.08740	-.05360	-.05480
4.591	2.850	4.04000	-.00090	-.00820	.00850	.08500	-.05390	-.05500
4.591	3.740	3.54000	-.00100	-.00810	.00860	.08270	-.05440	-.05510
4.591	4.650	3.02000	-.00110	-.00800	.00860	.08070	-.05460	-.05550
4.591	5.610	2.47000	-.00130	-.00790	.00870	.07880	-.05510	-.05550
4.591	6.610	1.90000	-.00150	-.00780	.00870	.07720	-.05540	-.05580
4.591	7.650	1.30000	-.00170	-.00770	.00870	.07590	-.05540	-.05600
4.591	8.710	.70000	-.00180	-.00750	.00880	.07480	-.05540	-.05620
4.591	9.760	.10000	-.00170	-.00720	.00880	.07370	-.05550	-.05600
4.591	10.840	-.51000	-.00160	-.00680	.00880	.07250	-.05550	-.05620
4.591	11.910	-1.13000	-.00140	-.00610	.00870	.07130	-.05540	-.05580
4.591	12.990	-1.74000	-.00110	-.00530	.00880	.07020	-.05550	-.05600
4.591	14.100	-2.37000	-.00050	-.00440	.00870	.06920	-.05540	-.05580
4.591	15.190	-3.00000	.00000	-.00340	.00870	.06800	-.05540	-.05570
4.591	16.300	-3.62000	.00060	-.00240	.00870	.06670	-.05520	-.05580
4.591	17.420	-4.25000	.00150	-.00130	.00870	.06560	-.05520	-.05570
4.591	18.540	-4.88000	.00240	-.00020	.00870	.06460	-.05510	-.05570
4.591	19.680	-5.51000	.00330	.00100	.00870	.06380	-.05490	-.05550
4.591	20.850	-6.16000	.00420	.00230	.00870	.06310	-.05510	-.05550
4.591	22.030	-6.81000	.00500	.00390	.00870	.06250	-.05510	-.05570
4.591	23.200	-7.45000	.00560	.00540	.00870	.06210	-.05510	-.05570
4.591	24.400	-8.09000	.00630	.00700	.00870	.06200	-.05490	-.05550
4.591	25.570	-8.72000	.00690	.00870	.00870	.06190	-.05490	-.05550
4.591	26.770	-9.36000	.00730	.01060	.00870	.06190	-.05490	-.05550
4.591	27.940	-9.96000	.00730	.01250	.00870	.06190	-.05490	-.05550
4.591	28.870	-10.45000	.00720	.01420	.00870	.06160	-.05490	-.05570
4.591	29.550	-10.81000	.00710	.01540	.00870	.06150	-.05490	-.05550
4.591	29.830	-10.95000	.00710	.01590	.00870	.06120	-.05490	-.05550
	GRADIENT	-.56880	-.00024	.00007	.00005	-.00255	-.00035	-.00023

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY062) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	45.000		

RUN NO. 63/ 0 RN/L = 16.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	2.450	7.40000	.00110	-.00920	-.01010	.10370	.11910	-.03510
4.591	3.450	6.42000	.00080	-.00910	-.00370	.09490	.05850	-.03840
4.591	4.240	5.66000	.00040	-.00920	.00110	.08820	.01090	-.04060
4.591	4.970	4.94000	.00020	-.00900	.00370	.08430	-.01330	-.04160
4.591	5.720	4.20000	.00000	-.00880	.00500	.08140	-.02600	-.04210
4.591	6.460	3.47000	-.00040	-.00880	.00580	.08000	-.03370	-.04270
4.591	7.210	2.73000	-.00090	-.00850	.00630	.07820	-.03840	-.04310
4.591	7.960	1.99000	-.00120	-.00830	.00670	.07690	-.04170	-.04360
4.591	8.710	1.24000	-.00140	-.00800	.00690	.07590	-.04390	-.04460
4.591	9.470	.50000	-.00160	-. 0750	.00720	.07520	-.04570	-.04550
4.591	10.220	-.24000	-.00160	-.00700	.00740	.07420	-.04700	-.04690
4.591	10.970	-.98000	-.00150	-.00630	.00750	.07320	-.04820	-.04740
4.591	11.720	-1.72000	-.00160	-.00540	.00770	.07230	-.04900	-.04840
4.591	12.480	-2.47000	-.00150	-.00440	.00780	.07170	-.04980	-.04910
4.591	13.240	-3.22000	-.00110	-.00340	.00790	.07100	-.05050	-.04980
4.591	13.990	-3.96000	-.00090	-.00230	.00790	.06990	-.05080	-.05000
4.591	14.750	-4.70000	-.00060	-.00120	.00800	.06890	-.05130	-.05090
4.591	15.520	-5.44000	-.00010	-.00010	.00810	.06800	-.05160	-.05090
4.591	16.280	-6.19000	.00040	.00100	.00820	.06720	-.05240	-.05120
4.591	17.050	-6.93000	.00100	.00230	.00820	.06660	-.05310	-.05140
4.591	17.820	-7.67000	.00160	.00360	.00830	.06620	-.05360	-.05140
4.591	18.590	-8.41000	.00250	.00490	.00830	.06590	-.05390	-.05170
4.591	19.360	-9.14000	.00350	.00630	.00840	.06590	-.05440	-.05170
4.591	20.140	-9.87000	.00440	.00800	.00840	.06580	-.05470	-.05170
4.591	20.920	-10.60000	.00510	.00970	.00850	.06590	-.05510	-.05170
4.591	21.700	-11.32000	.00570	.01160	.00850	.06630	-.05520	-.05150
4.591	22.480	-12.04000	.00610	.01350	.00850	.06670	-.05560	-.05140
4.591	23.250	-12.75000	.00650	.01540	.00850	.06700	-.05570	-.05170
4.591	24.030	-13.45000	.00700	.01740	.00850	.06750	-.05590	-.05140
4.591	24.810	-14.15000	.00760	.01960	.00850	.06800	-.05610	-.05140
4.591	25.560	-14.82000	.00790	.02170	.00860	.06830	-.05620	-.05150
4.591	26.190	-15.38000	.00820	.02340	.00860	.06880	-.05620	-.05140
	GRADIENT	-.97486	-.00037	.00006	.00557	-.00782	-.05365	-.00263

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY063) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	45.000		

RUN NO. 1063/ 0 RN/L = 17.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	2.310	7.53000	.00130	-.00930	.00850	.08510	-.05420	-.05410
4.591	2.730	7.13000	.00100	-.00930	.00850	.08400	-.05410	-.05410
4.591	3.380	6.49000	.00070	-.00920	.00850	.08230	-.05440	-.05410
4.591	4.120	5.77000	.00030	-.00910	.00860	.08080	-.05470	-.05410
4.591	4.870	5.03000	.00000	-.00900	.00860	.07940	-.05490	-.05380
4.591	5.650	4.26000	-.00030	-.00890	.00860	.07820	-.05500	-.05380
4.591	6.460	3.47000	-.00080	-.00870	.00860	.07690	-.05520	-.05380
4.591	7.300	2.64000	-.00120	-.00850	.00860	.07580	-.05570	-.05380
4.591	8.170	1.78000	-.00150	-.00820	.00860	.07510	-.05570	-.05380
4.591	9.030	.93000	-.00180	-.00770	.00870	.07420	-.05590	-.05380
4.591	9.890	.08000	-.00180	-.00710	.00870	.07340	-.05620	-.05340
4.591	10.770	-.79000	-.00180	-.00630	.00870	.07250	-.05620	-.05320
4.591	11.650	-1.66000	-.00180	-.00530	.00870	.07160	-.05650	-.05320
4.591	12.540	-2.53000	-.00170	-.00410	.00870	.07080	-.05670	-.05270
4.591	13.440	-3.42000	-.00130	-.00290	.00870	.07000	-.05700	-.05250
4.591	14.340	-4.30000	-.00100	-.00160	.00870	.06880	-.05690	-.05220
4.591	15.240	-5.18000	-.00050	-.00030	.00870	.06780	-.05690	-.05220
4.591	16.170	-6.08000	.00010	.00100	.00870	.06700	-.05690	-.05190
4.591	17.090	-6.97000	.00080	.00250	.00870	.06640	-.05690	-.05190
4.591	18.030	-7.87000	.00180	.00410	.00860	.06610	-.05690	-.05150
4.591	19.000	-8.79000	.00300	.00590	.00860	.06600	-.05670	-.05130
4.591	19.950	-9.69000	.00410	.00790	.00860	.06600	-.05670	-.05120
4.591	20.920	-10.60000	.00500	.01000	.00860	.06630	-.05690	-.05120
4.591	21.890	-11.50000	.00560	.01240	.00860	.06680	-.05670	-.05120
4.591	22.850	-12.39000	.00620	.01470	.00860	.06720	-.05650	-.05130
4.591	23.850	-13.29000	.00690	.01730	.00860	.06780	-.05670	-.05120
4.591	24.780	-14.13000	.00760	.01980	.00860	.06850	-.05640	-.05120
4.591	25.550	-14.81000	.00800	.02190	.00860	.06890	-.05640	-.05130
4.591	26.060	-15.26000	.00820	.02320	.00860	.06930	-.05640	-.05140
4.591	26.340	-15.51000	.00830	.02390	.00860	.06900	-.05640	-.05150
	GRADIENT	-.97733	-.00050	.00012	.00005	-.00223	-.00031	.00010

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY064) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	6.000	A-SCHD =	1.000
PHI =	-45.000		

RUN NO. 64/ 0 RN/L = 16.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	2.250	-7.50000	-.00940	-.00450	.00760	.09500	-.04760	-.05010
4.591	3.240	-6.55000	-.00820	-.00420	.00770	.09140	-.04830	-.05050
4.591	4.070	-5.77000	-.00710	-.00400	.00780	.08840	-.04860	-.05070
4.591	4.810	-5.06000	-.00650	-.00390	.00780	.08560	-.04930	-.05100
4.591	5.570	-4.34000	-.00580	-.00380	.00790	.08350	-.04970	-.05140
4.591	6.320	-3.61000	-.00510	-.00390	.00790	.08170	-.05000	-.05140
4.591	7.080	-2.88000	-.00430	-.00410	.00800	.08010	-.05010	-.05160
4.591	7.840	-2.15000	-.00360	-.00430	.00800	.07850	-.05050	-.05160
4.591	8.590	-1.42000	-.00300	-.00460	.00800	.07700	-.05060	-.05220
4.591	9.350	-.69000	-.00260	-.00510	.00810	.07600	-.05100	-.05220
4.591	10.110	.03000	-.00230	-.00570	.00810	.07490	-.05150	-.05260
4.591	10.870	.77000	-.00200	-.00650	.00820	.07370	-.05180	-.05310
4.591	11.630	1.50000	-.00150	-.00740	.00830	.07260	-.05230	-.05360
4.591	12.400	2.23000	-.00100	-.00830	.00830	.07160	-.05240	-.05430
4.591	13.170	2.97000	-.00070	-.00930	.00840	.07050	-.05290	-.05460
4.591	13.930	3.70000	-.00030	-.01040	.00850	.06890	-.05360	-.05460
4.591	14.710	4.44000	-.00020	-.01140	.00860	.06720	-.05410	-.05530
4.591	15.470	5.17000	-.00020	-.01250	.00860	.06590	-.05440	-.05570
4.591	16.250	5.90000	-.00030	-.01390	.00870	.06460	-.05470	-.05590
4.591	17.020	6.63000	-.00030	-.01530	.00870	.06380	-.05510	-.05590
4.591	17.800	7.36000	-.00060	-.01670	.00880	.06310	-.05540	-.05620
4.591	18.570	8.09000	-.00110	-.01820	.00880	.06270	-.05560	-.05660
4.591	19.360	8.81000	-.00180	-.01980	.00880	.06250	-.05590	-.05650
4.591	20.150	9.54000	-.00240	-.02170	.00890	.06230	-.05610	-.05710
4.591	20.930	10.26000	-.00280	-.02370	.00890	.06220	-.05640	-.05710
4.591	21.720	10.98000	-.00310	-.02590	.00890	.06210	-.05670	-.05720
4.591	22.500	11.68000	-.00320	-.02810	.00890	.06210	-.05670	-.05720
4.591	23.290	12.39000	-.00330	-.03040	.00900	.06220	-.05690	-.05720
4.591	24.080	13.09000	-.00320	-.03290	.00900	.06240	-.05690	-.05720
4.591	24.850	13.77000	-.00300	-.03530	.00900	.06240	-.05690	-.05720
4.591	25.620	14.43000	-.00280	-.03780	.00900	.06260	-.05690	-.05720
4.591	26.300	15.02000	-.00270	-.04000	.00890	.06300	-.05660	-.05720
	GRADIENT	.95189	.00116	.00024	.00008	-.00366	-.00063	-.00034

ORIGINAL PAGE IS
OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY065) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	-20.000	AILRON =	-20.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	-45.000		

RUN NO. 1064/ 0 RN/L = 16.86 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPG
4.591	2.080	-7.66000	-.00920	-.00450	.00860	.09370	-.05460	-.05480
4.591	2.360	-7.40000	-.00880	-.00440	.00860	.09270	-.05490	-.05480
4.591	2.910	-6.87000	-.00820	-.00430	.00860	.09070	-.05500	-.05500
4.591	3.640	-6.18000	-.00750	-.00410	.00870	.08810	-.05520	-.05530
4.591	4.390	-5.46000	-.00670	-.00390	.00870	.08570	-.05540	-.05560
4.591	5.160	-4.72000	-.00590	-.00380	.00870	.08340	-.05550	-.05580
4.591	5.970	-3.95000	-.00510	-.00380	.00880	.08140	-.05590	-.05620
4.591	6.790	-3.16000	-.00420	-.00400	.00880	.07950	-.05590	-.05650
4.591	7.650	-2.33000	-.00340	-.00420	.00890	.07780	-.05650	-.05670
4.591	8.520	-1.50000	-.00280	-.00460	.00900	.07620	-.05690	-.05700
4.591	9.380	-.67000	-.00230	-.00520	.00890	.07500	-.05690	-.05690
4.591	10.260	.17000	-.00200	-.00600	.00900	.07380	-.05700	-.05710
4.591	11.150	1.03000	-.00150	-.00700	.00900	.07250	-.05700	-.05690
4.591	12.040	1.89000	-.00090	-.00800	.00900	.07130	-.05720	-.05740
4.591	12.950	2.76000	-.00050	-.00920	.00900	.06990	-.05700	-.05760
4.591	13.860	3.63000	-.00020	-.01040	.00900	.06820	-.05720	-.05720
4.591	14.780	4.50000	.00000	-.01160	.00900	.06640	-.05700	-.05720
4.591	15.700	5.38000	.00000	-.01310	.00900	.06490	-.05700	-.05720
4.591	16.630	6.27000	.00000	-.01470	.00900	.06370	-.05700	-.05720
4.591	17.580	7.16000	-.00040	-.01640	.00900	.06310	-.05690	-.05720
4.591	18.560	8.07000	-.00120	-.01840	.00890	.06280	-.05690	-.05700
4.591	19.550	8.99000	-.00200	-.02050	.00890	.06260	-.05670	-.05700
4.591	20.540	9.90000	-.00260	-.02300	.00890	.06240	-.05650	-.05700
4.591	21.540	10.81000	-.00310	-.02560	.00890	.06240	-.05690	-.05670
4.591	22.530	11.70000	-.00330	-.02850	.00890	.06240	-.05650	-.05670
4.591	23.520	12.59000	-.00330	-.03150	.00890	.06250	-.05670	-.05650
4.591	24.500	13.46000	-.00310	-.03460	.00890	.06290	-.05670	-.05650
4.591	25.360	14.21000	-.00290	-.03730	.00890	.06310	-.05670	-.05650
4.591	26.010	14.77000	-.00280	-.03930	.00890	.06330	-.05650	-.05690
4.591	25.490	15.17000	-.00270	-.04070	.00890	.06290	-.05690	-.05670
	GRADIENT	.95284	.00106	.00025	.00005	-.00348	-.00034	-.00036

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVF) (AHY066) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	.000	RWGRIT =	.000
A-RATE =	1.000	A-SCHD =	1.000
PHI =	.000		

RUN NO. 72/ 0 RN/L = 15.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.650	.00000	-.00030	.00000	.00760	.07760	.00700	-.04870
4.591	.740	.00000	-.00030	.00000	.00770	.07490	.00450	-.04880
4.591	1.830	.00000	-.00040	.00010	.00780	.07350	-.00100	-.04940
4.591	2.860	-.01000	-.00040	.00010	.00780	.07180	-.00770	-.04990
4.591	3.920	-.02000	-.00040	.00010	.00780	.07070	-.01070	-.04990
4.591	4.980	-.02000	-.00060	.00000	.00800	.06930	-.01270	-.05060
4.591	6.040	-.03000	-.00050	.00010	.00810	.06780	-.01540	-.05130
4.591	7.100	-.04000	-.00060	.00010	.00810	.06700	-.01590	-.05180
4.591	8.170	-.04000	-.00050	.00000	.00820	.06580	-.01320	-.05240
4.591	9.220	-.05000	-.00040	.00000	.00830	.06500	-.01140	-.05290
4.591	10.300	-.06000	-.00030	.00000	.00840	.06380	-.00960	-.05340
4.591	11.360	-.06000	-.00030	.00000	.00850	.06280	-.00780	-.05390
4.591	12.430	-.07000	-.00020	.00000	.00860	.06210	-.00200	-.05440
4.591	13.510	-.08000	-.00020	.00000	.00860	.06120	.00330	-.05480
4.591	14.590	-.08000	-.00010	.00000	.00860	.06030	.00730	-.05490
4.591	15.660	-.09000	.00000	.00000	.00870	.05980	.01010	-.05540
4.591	16.750	-.10000	.00000	.00000	.00870	.05900	.01010	-.05560
4.591	17.830	-.10000	.00000	.00000	.00880	.05810	.00810	-.05580
4.591	18.900	-.11000	.00000	-.00010	.00880	.05720	.00660	-.05600
4.591	19.980	-.12000	.00000	.00000	.00890	.05650	.00980	-.05630
4.591	21.060	-.12000	.00000	.00000	.00880	.05600	.01060	-.05610
4.591	22.130	-.13000	.00000	.00000	.00890	.05560	.01740	-.05630
4.591	23.220	-.14000	-.00010	.00000	.00890	.05510	.02310	-.05630
4.591	24.300	-.14000	-.00020	.00000	.00880	.05500	.02690	-.05580
4.591	25.370	-.15000	-.00040	.00000	.00870	.05460	.03730	-.05560
4.591	26.440	-.15000	-.00040	.00000	.00870	.05430	.05150	-.05510
4.591	27.510	-.16000	-.00030	.00000	.00860	.05390	.05490	-.05470
4.591	28.570	-.17000	-.00030	.00000	.00860	.05360	.05920	-.05460
4.591	29.620	-.17000	-.00040	.00000	.00850	.05320	.05830	-.05390
4.591	30.670	-.18000	-.00030	.00000	.00840	.05280	.05340	-.05370
4.591	31.670	-.18000	-.00010	.00000	.00840	.05230	.05560	-.05340
4.591	32.510	-.19000	.00000	.00000	.00830	.05210	.06330	-.05300
	GRADIENT	-.00431	-.00005	.00001	.00006	-.00145	-.00388	-.00034

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY067) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1051/ 0 RN/L = 17.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-.980	.00000	-.00050	-.00010	.00840	.08920	-.05320	-.05380
4.591	.030	.00000	-.00050	-.00010	.00840	.08750	-.05330	-.05400
4.591	1.090	.00000	-.00060	-.00010	.00840	.08580	-.05350	-.05410
4.591	2.150	.00000	-.00060	-.00020	.00850	.08430	-.05400	-.05400
4.591	3.230	-.01000	-.00070	-.00020	.00850	.08290	-.05380	-.05460
4.591	4.350	-.02000	-.00080	-.00020	.00850	.08160	-.05400	-.05460
4.591	5.520	-.03000	-.00090	-.00030	.00860	.08030	-.05400	-.05520
4.591	6.730	-.03000	-.00090	-.00030	.00860	.07930	-.05430	-.05500
4.591	7.950	-.04000	-.00080	-.00030	.00860	.07860	-.05420	-.05540
4.591	9.180	-.05000	-.00080	-.00030	.00850	.07830	-.05400	-.05500
4.591	10.420	-.06000	-.00070	-.00030	.00850	.07800	-.05380	-.05480
4.591	11.670	-.06000	-.00070	-.00040	.00850	.07780	-.05350	-.05480
4.591	12.940	-.07000	-.00060	-.00040	.00850	.07780	-.05350	-.05450
4.591	14.210	-.08000	-.00050	-.00040	.00850	.07800	-.05350	-.05430
4.591	15.480	-.09000	-.00040	-.00040	.00840	.07810	-.05330	-.05450
4.591	16.770	-.10000	-.00030	-.00040	.00840	.07820	-.05330	-.05430
4.591	18.060	-.11000	-.00030	-.00040	.00840	.07870	-.05330	-.05410
4.591	19.350	-.11000	-.00030	-.00040	.00840	.07920	-.05280	-.05380
4.591	20.640	-.12000	-.00030	-.00030	.00830	.07990	-.05270	-.05380
4.591	21.970	-.13000	-.00040	-.00020	.00830	.08080	-.05250	-.05340
4.591	23.300	-.14000	-.00060	-.00010	.00830	.08170	-.05250	-.05340
4.591	24.620	-.14000	-.00070	-.00010	.00830	.08260	-.05230	-.05330
4.591	25.960	-.15000	-.00070	.00000	.00820	.08350	-.05200	-.05290
4.591	27.280	-.16000	-.00070	.00000	.00820	.08440	-.05200	-.05290
4.591	28.620	-.17000	-.00080	.00000	.00820	.08540	-.05170	-.05280
4.591	29.950	-.17000	-.00070	.00000	.00820	.08640	-.05170	-.05260
4.591	31.120	-.18000	-.00050	-.00010	.00820	.08730	-.05190	-.05240
4.591	31.980	-.19000	-.00050	-.00010	.00820	.08800	-.05190	-.05280
4.591	32.400	-.19000	-.00040	-.00010	.00820	.08820	-.05200	-.05280
4.591	32.640	-.19000	-.00040	-.00010	.00820	.08790	-.05220	-.05290
	GRADIENT	-.00352	-.00006	-.00002	.00002	-.00143	-.00016	-.00015

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY068) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	15.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1052/ 0 RN/L = 17.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	.050	.00000	.00000	.00020	.00800	.08830	-.05100	-.05140
4.591	1.120	.00000	.00000	.00020	.00810	.08660	-.05110	-.05170
4.591	2.190	-.01000	.00000	.00020	.00810	.08520	-.05130	-.05170
4.591	3.270	-.01000	-.00010	.00030	.00810	.08370	-.05150	-.05190
4.591	4.400	-.02000	-.00020	.00030	.00810	.08230	-.05160	-.05220
4.591	5.580	-.03000	-.00030	.00020	.00820	.08100	-.05180	-.05240
4.591	6.770	-.04000	-.00030	.00020	.00820	.08000	-.05180	-.05240
4.591	7.990	-.04000	-.00040	.00010	.00820	.07930	-.05180	-.05240
4.591	9.210	-.05000	-.00030	.00010	.00810	.07880	-.05140	-.05220
4.591	10.430	-.06000	-.00030	.00010	.00810	.07850	-.05160	-.05220
4.591	11.660	-.07000	-.00030	.00000	.00810	.07850	-.05110	-.05190
4.591	12.910	-.07000	-.00020	.00000	.00810	.07840	-.05110	-.05170
4.591	14.170	-.08000	-.00030	.00000	.00800	.07840	-.05110	-.05140
4.591	15.440	-.09000	-.00020	.00000	.00800	.07850	-.05100	-.05140
4.591	16.720	-.10000	-.00020	-.00010	.00800	.07870	-.05080	-.05170
4.591	18.010	-.11000	-.00020	-.00010	.00800	.07910	-.05080	-.05140
4.591	19.300	-.11000	-.00020	-.00010	.00800	.07960	-.05060	-.05120
4.591	20.600	-.12000	-.00020	-.00010	.00800	.08030	-.05060	-.05080
4.591	21.930	-.13000	-.00040	.00000	.00790	.08120	-.05050	-.05070
4.591	23.260	-.14000	-.00050	.00000	.00790	.08220	-.05030	-.05050
4.591	24.600	-.14000	-.00060	.00000	.00790	.08300	-.05020	-.05070
4.591	25.960	-.15000	-.00060	.00010	.00780	.08390	-.04980	-.05020
4.591	27.320	-.16000	-.00060	.00010	.00790	.08480	-.05000	-.05030
4.591	28.690	-.17000	-.00050	.00010	.00780	.08580	-.04970	-.05030
4.591	30.040	-.18000	-.00050	.00010	.00790	.08680	-.04970	-.05050
4.591	31.210	-.18000	-.00040	.00000	.00780	.08770	-.04970	-.05020
4.591	32.060	-.19000	-.00030	.00010	.00780	.08830	-.04980	-.05020
4.591	32.600	-.19000	-.00040	.00000	.00790	.08810	-.05020	-.05070
	GRADIENT	-.00462	-.00005	.00003	.00002	-.00137	-.00015	-.00017

ORIGINAL PAGE IS OF POOR QUALITY

LTV-44-512 (LA-58) ORBITER MODEL 42-0 (BWVFO) (AHY069) (19 JAN 76)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.7000 IN.	XO	
LREF =	474.8100 INCHES	YMRP =	.0000 IN.	YO	
BREF =	936.6800 INCHES	ZMRP =	375.0000 IN.	ZO	
SCALE =	.0150				

PARAMETRIC DATA

ELEVON =	.000	AILRON =	.000
SPDBRK =	55.000	BDFLAP =	.000
LWGRIT =	25.000	RWGRIT =	25.000
A-RATE =	5.000	A-SCHD =	2.000
PHI =	.000		

RUN NO. 1053/ 0 RN/L = 17.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CLN	CSL	CAB	CAF	CPB	CPC
4.591	-1.520	.01000	.00000	.00020	.00790	.08820	-.05020	-.05000
4.591	-.700	.00000	-.00010	.00020	.00790	.08620	-.05020	-.05020
4.591	.340	.00000	-.00010	.00020	.00800	.08390	-.05070	-.05070
4.591	1.410	.00000	-.00010	.00020	.00800	.08190	-.05050	-.05090
4.591	2.470	-.01000	-.00010	.00020	.00810	.07980	-.05110	-.05150
4.591	3.570	-.01000	-.00030	.00020	.00810	.07780	-.05110	-.05150
4.591	4.710	-.02000	-.00040	.00020	.00810	.07560	-.05150	-.05210
4.591	5.900	-.03000	-.00050	.00010	.00810	.07360	-.05160	-.05210
4.591	7.120	-.04000	-.00050	.00010	.00820	.07170	-.05170	-.05240
4.591	8.340	-.04000	-.00050	.00010	.00820	.07020	-.05170	-.05240
4.591	9.560	-.05000	-.00050	.00000	.00820	.06870	-.05200	-.05260
4.591	10.810	-.06000	-.00040	.00000	.00820	.06740	-.05180	-.05240
4.591	12.050	-.07000	-.00030	.00000	.00820	.06620	-.05170	-.05240
4.591	13.310	-.08000	-.00030	.00000	.00810	.06520	-.05130	-.05210
4.591	14.580	-.08000	-.00030	.00000	.00810	.06410	-.05120	-.05190
4.591	15.860	-.09000	-.00020	.00000	.00810	.06290	-.05120	-.05210
4.591	17.140	-.10000	-.00010	.00000	.00810	.06170	-.05120	-.05190
4.591	18.430	-.11000	.00000	.00000	.00800	.06070	-.05080	-.05190
4.591	19.710	-.12000	.00000	.00000	.00800	.05990	-.05080	-.05150
4.591	21.000	-.12000	-.00010	.00000	.00790	.05930	-.05030	-.05100
4.591	22.330	-.13000	-.00020	.00000	.00790	.05870	-.05020	-.05100
4.591	23.650	-.14000	-.00040	.00000	.00790	.05800	-.04980	-.05070
4.591	24.980	-.15000	-.00050	.00000	.00780	.05720	-.04930	-.05020
4.591	26.330	-.15000	-.00060	.00000	.00780	.05640	-.04900	-.05000
4.591	27.670	-.16000	-.00050	.00000	.00770	.05550	-.04900	-.04970
4.591	29.040	-.17000	-.00050	.00010	.00770	.05470	-.04890	-.04970
4.591	30.370	-.18000	-.00040	.00010	.00770	.05410	-.04890	-.04950
4.591	31.470	-.18000	-.00020	.00010	.00770	.05360	-.04890	-.04970
4.591	32.220	-.19000	-.00010	.00010	.00770	.05340	-.04900	-.04970
4.591	32.680	-.19000	-.00020	.00000	.00780	.05260	-.04940	-.05020
	GRADIENT	-.00408	-.00005	.00000	.00004	-.00200	-.00021	-.00033